DISCRIMINATION PROHIBITED — Title VI of the Civil Rights Act of 1964 states: "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Therefore, the programs of financial assistance for the handicapped, like every program or activity receiving financial assistance from the Department of Health, Education, and Welfare, must be operated in compliance with this law.
Mental Retardation

Grants

Fiscal Year 1970

U.S. Department of Health, Education, and Welfare

Patricia Reilly Hitt
Assistant Secretary for Community and Field Services

The Secretary's Committee on Mental Retardation

Washington, D.C.
March 1971
INTRODUCTION

This publication lists the Mental Retardation Project Grants awarded by the Department of Health, Education, and Welfare which had budget periods beginning in fiscal year 1970 (July 1, 1969 — June 30, 1970). It is arranged in two parts: Part I includes a listing of the construction and training grants, while Part II contains a listing of research and demonstration grants.

There are two research and demonstration grant indexes — a subject index and a state index. The subject index classifies the project grant by the narrative abstract statement furnished by the funding agency. The subject in the index is followed by a number assigned to the project grants which will enable a reader to easily locate his area of interest.

A system of classification devised by the Research Subcommittee of the Secretary's Committee on Mental Retardation has been used in arranging the research and demonstration grants in Part II in a systematized manner.

The classification system used for the research and demonstration grants is as follows:

1. Etiology
2. Epidemiology
3. Pathophysiology
4. Diagnosis and/or Evaluation
5. Prevention
6. Amelioration
   a. Education
   b. Vocational Rehabilitation
   c. Medical Treatment
7. Other

In deriving the classification system, the Subcommittee on Research first agreed upon functional definitions for the terms used in the classification system. The definitions are as follows:

1. Etiology includes all factors which cause mental retardation. These may be specific disease entities, trauma, poisonings, or similar factors. All research directly and uniquely related to a single disease agent is included.

2. Epidemiology includes those studies which relate to epidemiology of mental retardation, but not any of the specific diseases. Specific disease entities which might be etiologic agents of mental retardation have their epidemiology studies included under that disease alone.

3. Pathophysiology intends to consider all changes and events which are related to mental retardation and are independent of etiology. It is possible that some of the projects included here apply to several different diseases.

4. Diagnosis and/or Evaluation includes those projects which are related to the evaluation of brain function and the mentally retarded state, rather than a specific disease entity which might cause mental retardation. Diagnostic procedures which are specific for a disease entity are included under studies of that disease under "Etiology."

5. Prevention includes those projects aimed at the prevention of a disease which might possibly result in mental retardation. The disease may be prevented by elimination of some vector or etiological agent.
6. Amelioration includes those projects relating to the training, education, and rehabilitation of the retarded. These projects would have the effect of helping the individuals who are mentally retarded pursue a better life, or help them adjust better to their situation.

7. Other includes those projects which do not appear to clearly fall within the six previous classifications.

An abstract describing the purpose of the research or demonstration project grant is included. Additional information concerning the grants may be secured from the grantee or the agency awarding the grant.
EXPLANATION OF FORMAT

A code precedes the title of the grant followed by the name and address of the grantee in both parts of this publication. The dates indicate the budget period for which funds were made available. Indication is made as to whether the budget period shown represents an initial, continuation, or renewal grant.

Just after the amount of the award are capital letters. These capital letters identify the agency making the award as follows:

HSMHA: Health Services and Mental Health Administration
CHS: Community Health Services
P: Partnership for Health 314(c) program
HFPCS: Health Facilities Planning and Construction Service
MCHS: Maternal and Child Health Service
NIMH: National Institute of Mental Health

NIH: National Institutes of Health
NICHD: National Institute of Child Health and Human Development
NINDS: National Institute of Neurological Diseases and Stroke

OE: Office of Education

OSPU: Office of Surplus Property Utilization

SRS: Social and Rehabilitation Service
ORD: Office of Research and Demonstration
RSA: Rehabilitation Services Administration
DMR: Division of Mental Retardation
DRF: Division of Rehabilitation Facilities
CSA: Community Services Administration
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FOR EACH STATE, 1970

ALABAMA

TRAINING

01B004 A PROGRAM FOR THE TRAINING OF CLINICAL
PSYCHOLOGISTS IN THE FIELD OF MENTAL
RETARDATION, UNIVERSITY OF ALABAMA,
BIRMINGHAM
6/1/70-5/31/71, CONTINUATION, $71,522. SRS-DMR

01B006 A PROPOSAL TO ESTABLISH A TRAINING PROGRAM
FOR ADMINISTRATORS AND PROGRAM DIRECTORS
OF MENTAL RETARDATION FACILITIES, UNIVERSITY
OF ALABAMA, BIRMINGHAM
7/1/70-6/30/71, INITIAL, $67,750. SRS-DMR

01B010 CENTER FOR DEVELOPMENTAL AND LEARNING
DISORDERS UNIVERSITY OF ALABAMA, BIRMINGHAM
1/1/70-12/31/70, CONTINUATION, $651,635. HSMHA-MCHS

01B015 CYTOGENETIC STUDIES IN MENTAL RETARDATION
AND BIRTH DEFECTS UNIVERSITY OF ALABAMA,
BIRMINGHAM
7/1/69-6/30/70, CONTINUATION, $42,732. HSMHA-MCHS

01B021 EXPERIMENTAL PSYCHOLOGY, UNIVERSITY OF
ALABAMA, BIRMINGHAM, ALABAMA,
7/70-6/71, CONTINUATION, $46,327. NICHD

01B025 INTENSIVE INDIVIDUAL TRAINING UNIT, PARTLOW
STATE SCHOOL AND HOSPITAL, TUSCALOOSA
6/1/70-5/31/71, CONTINUATION, $85,454. SRS-DMR

01B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN ALABAMA
AGRICULTURAL AND MECHANICAL COLLEGE,
NORMAL
6/1/70-8/31/71, RENEWAL, $30,600. OE

01B031 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN, TROY
STATE UNIVERSITY, TROY, ALABAMA,
6/1/70-8/31/71, INITIAL, $15,000. OE

01B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN AUBURN
UNIVERSITY, AUBURN
6/1/70-8/31/71, RENEWAL, $25,200. OE

01B036 A PROPOSAL TO ESTABLISH A TRAINING PROGRAM
FOR ADMINISTRATORS AND PROGRAM DIRECTORS
OF MENTAL RETARDATION FACILITIES, UNIVERSITY
OF ALABAMA, BIRMINGHAM
7/1/70-6/30/71, CONTINUATION, $71,522. SRS-DMR

01B045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN STATE
DEPARTMENT OF EDUCATION, MONTGOMERY
6/1/70-6/30/71, INITIAL, $53,750. OE

01B050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN TUSKEGEE
INSTITUTE, TUSKEGEE
6/1/70-5/31/71, RENEWAL, $17,700. OE

01B055 REGIONAL TRAINING CENTER IN MENTAL
RETARDATION, UNIVERSITY OF ALABAMA,
BIRMINGHAM
6/1/70-5/31/71, CONTINUATION, $82,288. SRS-DMR

CONSTRUCTION

01C005 COMMUNITY FACILITIES CONSTRUCTION, LURLEEN B.
WALLACE MR HOSPITAL, DECATUR
6/12/69, INITIAL, $94,700. SRS-DMR

01C025 COMMUNITY FACILITIES CONSTRUCTION, MOBILE
DEVELOPMENTAL CENTER (YOUNG ADULT
VOCATIONAL TRAINING CENTER), MOBILE 3/27/70,
INITIAL, $181,693. HSMHA-MCHS

ALASKA

TRAINING

02B005 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN STATE
DEPARTMENT OF EDUCATION, JUNEAU
6/1/70-8/31/71, RENEWAL, $10,100. OE

OTHER

02D010 CHILD STUDY CENTER, ANCHORAGE STATE
DEPARTMENT OF HEALTH AND WELFARE, JUNEAU
7/1/69-6/30/70, CONTINUATION, $50,000. HSMHA-MCHS

02D020 MR INITIAL STAFFING, ANCHORAGE RETARDED
CHILDREN ASSOCIATION
7/1/70-6/30/71, INITIAL, $29,100. SRS-DMR
## Arizona

**Training**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>04B005</td>
<td>Inservice training program for attendant personnel for Arizona children's colony, Coolidge</td>
<td>7/1/70-6/30/71, Continuation, $23,759. SRS-DMR</td>
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<tr>
<td>04B010</td>
<td>Preparation of professional personnel in the education of handicapped children, Arizona, state university, Tempe</td>
<td>6/1/70-6/31/71, Renewal, $43,900. OE</td>
</tr>
<tr>
<td>04B015</td>
<td>Preparation of professional personnel in the education of handicapped children, Northern Arizona university, Flagstaff</td>
<td>6/1/70-6/30/71, Renewal, $25,900. OE</td>
</tr>
<tr>
<td>04B020</td>
<td>Preparation of professional personnel in the education of handicapped children state department of public instruction, Phoenix</td>
<td>6/1/70-6/30/71, Renewal, $29,250. OE</td>
</tr>
<tr>
<td>04B025</td>
<td>Preparation of professional personnel in the education of handicapped children</td>
<td>6/1/70-6/30/71, Renewal, $41,400. OE</td>
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</tbody>
</table>

**Other**

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<th>Code</th>
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<tr>
<td>04D005</td>
<td>A developmental program for the severely retarded, Arizona children's colony, Coolidge</td>
<td>2/1/70-12/31/71, Continuation, $59,610. SRS-DMR</td>
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<tr>
<td>04D009</td>
<td>Adventure '69 in '70, Arizona association for retarded children, Phoenix</td>
<td>6/25/70-7/31/70, Initial, $4,350. SRS-DMR</td>
</tr>
<tr>
<td>04D020</td>
<td>Child developmental center, Maricopa county state department of health, Phoenix</td>
<td>7/1/69-6/30/70, Continuation, $181,636. HSMHA-MCHS</td>
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<tr>
<td>04D025</td>
<td>Children's evaluation center, southern Arizona, Pima county state department of health, Phoenix</td>
<td>7/1/69-6/30/70, Continuation, $109,984. HSMHA-MCHS</td>
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<tr>
<td>04D036</td>
<td>Mr. initial staffing, Cochise county ARC, Flagstaff</td>
<td>7/1/70-6/30/71, Initial, $10,657. SRS-DMR</td>
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<td>04D038</td>
<td>Mr. initial staffing, Greenlee county ARC, Morenci</td>
<td>9/1/70-6/30/71, Initial, $11,517. SRS-DMR</td>
</tr>
<tr>
<td>04D040</td>
<td>Mr. initial staffing, Douglas association for retarded children, Douglas</td>
<td>9/1/70-6/30/71, Continuation, $13,307. SRS-DMR</td>
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<tr>
<td>04D041</td>
<td>Mr. initial staffing, Gila county association for retarded children, Globe</td>
<td>9/1/70-6/30/71, Initial, $15,900. SRS-DMR</td>
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<tr>
<td>04D042</td>
<td>Mr. initial staffing, Graham county association for retarded children, Thatcher</td>
<td>9/1/70-6/30/71, Initial, $4,631. SRS-DMR</td>
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<tr>
<td>04D043</td>
<td>Initial staffing, handicapped children's development center, Prescott</td>
<td>7/1/70-6/30/71, Initial, $6,016. SRS-DMR</td>
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<tr>
<td>04D047</td>
<td>Mr. initial staffing, Pinal county accommodation schools, Florence</td>
<td>9/1/70-6/30/71, Initial, $7,795. SRS-DMR</td>
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<td>04D049</td>
<td>Mr. initial staffing, Pinal county special education program, Florence</td>
<td>9/1/70-6/31/71, Initial, $18,315. SRS-DMR</td>
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<tr>
<td>04D051</td>
<td>Mr. initial staffing, St. Michaels association for special education, Inc., St. Michaels</td>
<td>9/1/70-6/30/71, Initial, $67,019. SRS-DMR</td>
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<tr>
<td>04D053</td>
<td>Mr. initial staffing, Salvation army, Southwestern, Inc., Phoenix</td>
<td>9/1/70-6/30/71, Continuation, $48,270. SRS-DMR</td>
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<tr>
<td>04D055</td>
<td>Mr. initial staffing, Santa Cruz county assoc. for mentally retarded children, Inc., Nogales</td>
<td>9/1/70-6/30/71, Continuation, $13,929. SRS-DMR</td>
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## Arkansas

**Training**

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<tr>
<td>05B005</td>
<td>Inservice training program for attendant personnel</td>
<td>MR Arkansas children's colony, Conway</td>
</tr>
<tr>
<td>05B010</td>
<td>Preparation of professional personnel in the education of handicapped children</td>
<td>State college of Arkansas, Conway, Arkansas, 6/1/70-6/30/71, Renewal, $47,300. OE</td>
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<tr>
<td>05B015</td>
<td>Preparation of professional personnel in the education of handicapped children, Arkansas state university, Little Rock</td>
<td>6/1/70-6/30/71, Renewal, $22,500. OE</td>
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<tr>
<td>05B020</td>
<td>Preparation of professional personnel in the education of handicapped children</td>
<td>State department of education, Little Rock</td>
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<tr>
<td>05B025</td>
<td>Preparation of professional personnel in the education of handicapped children</td>
<td>University of Arkansas, Fayetteville</td>
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**Construction**

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<td>05C002</td>
<td>Community facilities construction, North Hill exceptional children's school, North Little Rock</td>
<td>5/1/70, Initial, $556,085. SRS-DMR</td>
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<tr>
<td>05C003</td>
<td>Community facilities construction, Texarkana special education kindergarten, Texarkana</td>
<td>6/30/70, Initial, $71,444. SRS-DMR</td>
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**Other**

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<tr>
<td>05D005</td>
<td>Child development center, Little Rock state board of health, Little Rock</td>
<td>7/1/69-6/30/70, Continuation, $65,142. HSMHA-MCHS</td>
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<tr>
<td>05D010</td>
<td>Facility improvement grant abilities unlimited, Inc., Hot Springs</td>
<td>5/1/70-4/30/71, Continuation, $6,088. SRS-RSA</td>
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<tr>
<td>05D015</td>
<td>Facility improvement grant abilities unlimited, Inc., Magnolia</td>
<td>6/1/70-5/31/71, Continuation, $5,674. SRS-RSA</td>
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<tr>
<td>05D026</td>
<td>Program and staff development for community day service centers, Conway</td>
<td>6/1/70-6/30/71, Initial, $15,913. SRS-DMR</td>
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<tr>
<td>05D030</td>
<td>Training for the profoundly through borderline retarded, Arkansas children's colony, Conway</td>
<td>9/1/70-6/30/71, Initial, $6,496. SRS-DMR</td>
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<tr>
<td>05D035</td>
<td>Mr. initial staffing, Arkansas society for crippled children, Pine Bluff</td>
<td>9/1/70-6/30/71, Continuation, $11,743. SRS-DMR</td>
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<td>05D037</td>
<td>Mr. initial staffing, Arkansas society for crippled children, Pine Bluff</td>
<td>7/1/70-6/30/71, Initial, $21,000. SRS-DMR</td>
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<td>05D040</td>
<td>Mr. initial staffing, Bost school for limited children, Inc., Fort Smith</td>
<td>9/1/70-6/30/71, Continuation, $10,946. SRS-DMR</td>
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CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

06B005 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SAN CARLOS, SAN FRANCISCO, 6/1/70-8/31/71, RENEWAL, $45,700. OE

06B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SAN DIEGO, SAN DIEGO, 6/1/70-8/31/71, RENEWAL, $56,600. OE

06B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SONOMA, 6/1/70-8/31/71, RENEWAL, $54,000. OE

06B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SONOMA, 6/1/70-8/31/71, RENEWAL, $56,972. OE

06B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CLARA, SANTA CLARA, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CLARA, SANTA CLARA, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B040 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CLARA, SANTA CLARA, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B055 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CLARA, SANTA CLARA, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B060 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B065 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CLARA, SANTA CLARA, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B070 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B075 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CLARA, SANTA CLARA, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B080 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B085 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CLARA, SANTA CLARA, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B090 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B095 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B100 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B105 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B110 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B115 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B120 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B125 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B130 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B135 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B140 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B145 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B150 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B155 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B160 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B165 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE

06B170 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SANTA CRUZ, SANTA CRUZ, 6/1/70-8/31/71, RENEWAL, $57,400. OE
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

6/1/70-9/30/71, INITIAL, $168,058. SRS-RSA

CONNECTICUT

TRAINING

09B004 BIOCHEMICAL, CHROMOSOMAL, AND CLINICAL GENETICS IN MAN, YALE UNIVERSITY, NEW HAVEN, CONNECTICUT, 7/1-7/31, CONTINUATION, $66,446. NICHD

09B005 FIELD INSTRUCTION OF SOCIAL WORK, UNIVERSITY OF CONNECTICUT, STORRS 9/1/69-8/31/70, RENEWAL, $28,418. SRS-RSA

09B010 INDIVIDUAL TRAINEES IN INSTITUTIONALIZING RESIDENTS BY INSERVICE STAFF MR MANFIELD TRAINING SCHOOL, MANSFIELD DEPOT 7/1/70-6/30/71, CONTINUATION, $22,233. SRS-RSA

09B011 INSERVICE PROGRAM FOR SEVERELY RETARDED, SOUTHBURY TRAINING SCHOOL, SOUTHBURY 7/1/70-6/30/71, CONTINUATION, $22,751. SRS-RSA

09B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SOUTHERN CONNECTICUT STATE COLLEGE, NEW HAVEN 6/1/70-8/31/71, RENEWAL, $60,700. OE

09B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, HARTFORD 6/1/70-8/31/71, RENEWAL, $10,800. OE

09B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN ST. JOSEPH COLLEGE, WEST HARTFORD 6/1/70-8/31/71, RENEWAL, $11,500. OE

09B026 PSYCHOLOGY OF RETARDATION, RESEARCH AND TEACHING, UNIVERSITY OF CONNECTICUT, STORRS, CONNECTICUT, 7/1-7/31, CONTINUATION, $48,420. NICHD

09B030 UPGRADE ORIENTATION AND TRAINING FOR COTTAGE AIDS MR SOUTHBURY TRAINING SCHOOL, SOUTHBURY 7/1/70-6/30/70, RENEWAL, $24,974. SRS-RSA

09B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF CONNECTICUT, STORRS 6/1/70-8/31/71, RENEWAL, $58,100. OE

09B040 SEMINAR AND INTERDISCIPLINARY APPROACH TO PERCEPTUAL MOTOR DYSFUNCTION, CONNECTICUT OCCUPATIONAL THERAPY ASSOC., CROMWELL 4/8/70-7/30/71, INITIAL, $600. SRS-RSA

09B045 SPECIAL PROJECTS, TRAINING COOPERATIVE TEACHERS IN SPECIAL EDUCATION, MENTAL REHABILITATION, UNIVERSITY OF CONNECTICUT, STORRS, CONNECTICUT, 6/1/70-8/31/71, INITIAL, $39,246. OE

OTHER

09D005 ADVANCED PROGRAM FOR PROFOUNDLY AND SEVERELY RETARDED, SOUTHBURY TRAINING SCHOOL, SOUTHBURY 6/1/70-9/30/71, CONTINUATION, $85,403. SRS-RSA

09D006 COST OF COMPLETION FOR PROFESSIONAL AND TECHNICAL PERSONNEL, SEASIDE REGIONAL CENTER, WATERFORD, CONNECTICUT 7/1/70-6/30/71, $22,914. CONTINUATION, SRS-RSA

09D010 FACILITY IMPROVEMENT GRANT GOODWILL INDUSTRIES OF CENTRAL CONNECTICUT, INC., NEW HAVEN 6/30/69-6/29/70, RENEWAL, $27,569. SRS-RSA

09D015 HABILITATION OF RETARDED RESIDENTS TO COMMUNITY LIFE, SEASIDE REGIONAL CENTER, WATERFORD 1/1/70-12/31/70, CONTINUATION, $85,972. SRS-RSA

09D030 INDIVIDUAL PROGRAMMING FOR SEVERELY AND PROFOUNDLY RETARDED, MANSFIELD TRAINING SCHOOL, MANSFIELD DEPOT 6/1/70-8/31/71, CONTINUATION, $85,994. SRS-RSA

09D025 MR INITIAL STAFFING, GREATER HARTFORD ASSOC., FOR RETARDED CHILDREN, INC., HARTFORD 6/1/70-6/30/71, INITIAL, $168,058. SRS-RSA

08B045 Regional Workshop on Nutrition and Feeding of Handicapped Children, University of Colorado, Denver 7/1-6/30/71, INITIAL, $5,139. HSMHA-MCHS

08B015 Special Projects, Training Cooperative Teachers in Special Education, Mental Rehabilitation, University of Connecticut, Storrs, Connecticut, 9/1-6/30/70, Continuation, $41,065. NICHD

08B005 Field Instruction of Social Work, University of Connecticut, Storrs, Connecticut, 7/1-31, Continuation, $66,446. NICHD

08B004 Biochemical, Chromosomal, and Clinical Genetics in Man, Yale University, New Haven, Connecticut, 7/1-7/31, Continuation, $66,446. NICHD

08B010 Individual Trainees in Institutionalizing Residents by Inservice Staff Mr. Manfield Training School, Mansfield Depot, 7/1-6/30/71, Continuation, $22,233. SRS-RSA

08B011 Inservice Program for Severely Retarded, Southbury Training School, Southbury, 7/1-6/30/71, Continuation, $22,751. SRS-RSA

08B004 Field Instruction of Social Work, University of Connecticut, Storrs, Connecticut, 7/1-31, Continuation, $66,446. NICHD

08B011 Inservice Training, Mental Retardation, Southbury Training School, Southbury, 7/1-6/30/71, Continuation, $22,751. SRS-RSA
DELAWARE

TRAINING

10B005 DEVELOP KNOWLEDGE TECHNIQUES - METHODOLOGY TO PROVIDE STAFF MR HOSPITAL FOR THE MENTALLY RETARDED, GEORGETOWN 7/1/69-8/31/70, CONTINUATION, $24,490, SRS-DMR

10B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF DELAWARE, NEWARK 6/1/70-8/31/71, RENEWAL, $15,900. OE

CONSTRUCTION

10C005 NEWARK DAY CARE CENTER NEWARK 6/30/70 INITIAL $100,000 SRS-DMR

OTHER

10D005 MR INITIAL STAFFING, DELAWARE DEPARTMENT OF MENTAL HEALTH, WILMINGTON 10/1/69-9/30/70, INITIAL, $19,590. SRS-DMR

10D010 MR INITIAL STAFFING, CHILDIAGNOSTIC AND DEVELOPMENT CENTER WILMINGTON 9/1/70-8/31/71 INITIAL $17,269. SRS-DMR

10D015 STUDENT WORK EXPERIENCE AND TRAINING DELAWARE STATE HOSPITAL NEW CASTLE 6/1/70-8/31/70, INITIAL $11,025. SRS-DMR

DISTRICT OF COLUMBIA

TRAINING

11B005 CHROMOSOMIC STUDIES OF CHILDREN WITH CONGENITAL ANOMALIES OR MENTAL RETARDATION CHILDREN'S HOSPITAL OF D.C., WASHINGTON, D.C. 7/1/69-6/30/70, CONTINUATION, $7,318. SRS-DMR

11B010 FIELD INSTRUCTION FOR SOCIAL WORKERS IN MENTAL RETARDATION HOWARD UNIVERSITY, WASHINGTON, D.C. 7/1/69-6/30/70, CONTINUATION, $9,672. CMS-P

11B020 FIELD INSTRUCTION FOR SOCIAL WORKERS IN MENTAL RETARDATION SCHOOL OF SOCIAL WORK HOWARD UNIVERSITY OF DISTRICT OF COLUMBIA 7/1/69-6/30/70 CONTINUATION, $75,371. SRS-DMR

11B021 INTER AND INTRA DISCIPLINARY TRAINING IN MENTAL RETARDATION GEORGETOWN UNIVERSITY, WASHINGTON, D.C. 7/1/69-10/31/70, INITIAL, $67,886. SRS-DMR

11B022 INTERDISCIPLINARY TRAINING-SPECIAL PROJECT-UNIVERSITY AFFILIATED FACILITY, GEORGETOWN UNIVERSITY, WASHINGTON, D.C. 6/1/70-5/31/71, RENEWAL, $22,000. OE

11B025 METABOLIC AND CYTOGENETIC LABORATORIES HOWARD UNIVERSITY, WASHINGTON, D.C. 7/1/69-6/30/70, CONTINUATION, $189,266. SRS-DMR

11B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF MENTALLY HANDICAPPED CHILDREN BOARD OF EDUCATION OF THE WASHINGTON, D.C. 6/1/70-5/31/71, RENEWAL, $18,700. OE

11B045 TRAINING IN CHILD DEVELOPMENT HOWARD UNIVERSITY, WASHINGTON, D.C. 7/1/69-6/30/70, CONTINUATION, $187,246. SRS-DMR

OTHER

11D005 CLINIC FOR MENTALLY RETARDED CHILDREN DEPARTMENT OF PUBLIC HEALTH, DISTRICT OF COLUMBIA 7/1/69-6/30/70, CONTINUATION, $100,066. SRS-DMR

11D010 COMPREHENSIVE DAY CARE FOR MODERATELY AND PROFOUNDLY RETARDED ADULTS, JEWISH FOUNDATION FOR RETARDED CHILDREN, WASHINGTON, D.C. 9/1/69-8/31/71, CONTINUATION, $91,551. SRS-DMR

11D020 FACILITY IMPROVEMENT GRANT DAVIS MEMORIAL GOODWILL INDUSTRIES, WASHINGTON, D.C. 5/1/70-4/30/71, CONTINUATION, $11,382. SRS-DMR

11D031 MR INITIAL STAFFING HELP FOR RETARDED CHILDREN, INC., D.C. 7/1/70-6/30/71, INITIAL $20,385. SRS-DMR

11D035 STUDENT WORK EXPERIENCE AND TRAINING JEWISH FOUNDATION FOR RETARDED CHILDREN, INC., DISTRICT OF COLUMBIA 6/1/70-5/31/71, CONTINUATION, $11,382. SRS-DMR

11D050 STANDARDS FOR COMMUNITY SERVICES MENTALLY RETARDATION AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, WASHINGTON, D.C. 4/1/70-3/31/71, CONTINUATION, $42,447. CMS-P

11D051 SELF HELP TRAINING DISTRICT TRAINING SCHOOL LAUREL 5/1/70-4/30/71, CONTINUATION, $89,817. SRS-DMR

FLORIDA

TRAINING

12B005 A TRAINING PROGRAM IN THE MANAGEMEN PROGRAM FOR THE MENTALLY RETARDED FLORIDA STATE UNIVERSITY, TALLAHASSEE

OTHER
### Construction, Training and Other Grants for Each State, 1970

#### Audio-Visual and Psychology Conferences
- **University of Miami, Coral Gables**
  - 6/1/69-5/31/70, Initial: $25,856. HSMA-MCHS

#### Child Development Center and Training Facility
- **University of Miami, Coral Gables**
  - 1/1/69-12/31/69, Continuation: $790,141. HSMA-MCHS

#### Comprehensive Social Work Training in Mental Retardation
- Department of Social Work, Florida State University, Tallahassee, Florida
  - 12/1/69-11/30/70, Continuation: $69,812. SRS-DMR

#### Field Instruction of Rehabilitation Counseling Students
- University of Florida, Gainesville
  - 9/1/69-8/31/70, Continuation: $32,941. SRS-RSA

#### Inservice Training Mental Retardation
- Sunland Training Center at MARIANNA, MARIANNA
  - 7/1/70-6/30/71 Continuation: $24,111 SRS-DMR

#### Interdisciplinary Training Special Project
- University of Miami, Coral Gables
  - 6/1/70-8/31/71, Renewal: $28,000. OE

#### Inservice Training for Optimal Personnel Effective Sunland Training Center at Miami, OPA-LOCKA
  - 1/1/70-12/31/70 Initial: $21,816. SRS-DMR

#### Preparation of Professional Personnel in the Education of Handicapped Children Florida Atlantic University, Doca Raton
  - FY 1969, Renewal: $11,000. OE

#### Preparation of Professional Personnel in the Education of Handicapped Children Florida State University, Tallahassee
  - FY 1969, Renewal: $49,500. OE

#### Preparation of Professional Personnel in the Education of Handicapped Children Florida State University, Tallahassee
  - Department of Education, Tallahassee
  - FY 1969, Renewal: $35,925. OE

#### Preparation of Professional Personnel in the Education of Handicapped Children
- University of Miami, Coral Gables
  - 6/1/70-8/31/71, Renewal: $87,300. OE

#### Preparation of Professional Personnel in the Education of Handicapped Children
- University of Miami, Coral Gables
  - 6/1/70-8/31/71, Renewal: $87,300. OE

#### Preparation of Professional Personnel in the Education of Handicapped Children Florida
- University of Florida, Gainesville
  - 7/1/69-6/30/70, Continuation: $75,000. HSMHA-MCHS

#### Preparation of Professional Personnel in the Education of Handicapped Children
- University of South Florida, Tampa
  - 7/1/69-6/30/70, Continuation: $2,357. SRS-DMR

#### Preparation of Professional Personnel in the Education of Handicapped Children
- University of Miami, Coral Gables
  - 1/1/69-6/30/70, Continuation: $83,004. HSMHA-MCHS

#### Inservice Training Mental Retardation Sunland Training Center at Fort Myers, Fort Myers
  - 1/1/70-6/30/71 Initial: $23,852. SRS-DMR

#### Training Services Grant Palm Beach Habilitation Center, Lake Worth
  - 6/25/70-6/24/71, Continuation: $90,076. SRS-RSA

#### Inservice Training Mental Retardation Sunland Hospital at Orlando, Orlando
  - 1/1/70-6/30/71 Renewal: $15,621. SRS-DMR

### Construction Projects

#### Community Facilities Construction Mc Donald/Training Center Foundation Inc.
- 5/25/70 Initial: $219,219. SRS-DMR

#### Community Facilities Construction Pediatric Care Center of BROWARD COUNTY PT LAUDERDALE
- 10/29/69 Initial: $101,325. SRS-DMR

#### Community Facilities Construction PINE CASTLE SCHOOL JACKSONVILLE
- 1/29/70 Initial: $22,048. SRS-DMR

### Other

#### Developmental Evaluation Clinic, DALE COUNTY BOARD OF HEALTH JACKSONVILLE
- 7/1/68-6/30/69, Renewal: $171,255. SRS-CB

#### MR Initial Staffing SEMINOLE COUNTY ASSOCIATION FOR RETARDED CHILDREN, SANFORD
- 7/1/69-8/31/71 Initial: $7,395. SRS-DMR

#### Intensive Programming for Optimal Resin
dent Development Sunland Training Center at Miami, OPA-LOCKA
- 9/1/69-4/30/71 Continuation: $93,100. SRS-DMR

#### MR Initial Staffing, Broward Co. Assoc. For Retarded Children, FORT LAUDERDALE
- 7/1/69-6/30/71 Continuation: $55,864. SRS-DMR

#### MR Initial Staffing, Citrus Co. Assoc. For Retarded Children, INVERNESS
- 7/1/69-6/30/71 Continuation: $11,996. SRS-DMR

#### MR Initial Staffing, Escambia Co. Assoc. For Retarded Children, PENSACOLA
- 7/1/69-6/30/71 Continuation: $11,512. SRS-DMR

#### MR Initial Staffing Upper Pinellas Association For Retarded Children, Clearwater
- 7/1/69-6/30/71 Initial: $10,547. SRS-DMR

#### MR Initial Staffing, KEECHEOBBEE REHABILITATION FACILITY INC. KEECHEOBBEE
- 7/1/69-6/30/71 Continuation: $15,472. SRS-DMR

#### MR Initial Staffing, Marion County Association For Retarded Children, Ocala
- 7/1/69-6/30/71 Continuation: $14,915. SRS-DMR

#### MR Initial Staffing, Morning Star School, ORLANDO
- 7/1/69-6/30/71 Continuation: $6,722. SRS-DMR

#### MR Initial Staffing, Lee County Association For Retarded Children, PENSACOLA
- 7/1/69-6/30/71 Initial: $5,438. SRS-DMR

#### MR Initial Staffing Pinellas Association For Retarded Children St. PETERSBURG
- 7/1/69-6/30/71 Initial: $14,915. SRS-DMR

#### MR Initial Staffing Executive Secretary Of Catholic Charities JACKSONVILLE
- 9/1/69-8/31/71 Initial: $10,600. SRS-DMR

#### MR Initial Staffing Pinellas Association For Retarded Children, St. PETERSBURG
- 9/1/69-8/31/71 Continuation: $20,247. SRS-DMR

#### MR Initial Staffing, ST. ANDREWS BAY CENTER FOR HANDICAPPED, STUART
- 7/1/69-6/30/71 Continuation: $2,357. SRS-DMR

#### MR Initial Staffing Exceptional Children's School And Nursery, HOMESTEAD
- 6/1/69-5/31/71 Initial: $42,500. REVENUE

#### MR Initial Staffing Pioneer Occupational Center For Handicapped, STUART
- 7/1/69-6/30/71 Initial: $24,762. SRS-DMR

#### MR Initial Staffing ESCAMBIA COUNTY ASSOCIATION For Retarded Children, PENSACOLA
- 6/1/69-5/31/71 Initial: $14,685. SRS-DMR

#### Tampa Diagnostic And Evaluation Clinic State Board Of Health, JACKSONVILLE
- 7/1/69-6/30/70, Continuation: $75,000. HSMA-MCHS

#### Training Services Grant Palm Beach Habilitation Center, Lake Worth
- 6/25/70-6/24/71, Continuation: $90,076. SRS-RSA

#### Student Work Experience And Training Division Of Retardation, TALLAHASSEE
- 6/15/70-8/14/70 Initial: $19,214. SRS-DMR

#### MR Initial Staffing Pediatric Care Center Of BROWARD COUNTY FORT LAUDERDALE
- 9/1/69-8/31/71 Initial: $36,329. SRS-DMR

#### Work Experience For Juvenile Offenders In The Habilitation Of The Mentally Retarded Division Of Retardation, TALLAHASSEE
- 6/25/70-6/30/71 Initial: $30,966. SRS-DMR
### Georgia

#### Construction, Training and Other Grants for Each State, 1970

**Training**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>State</th>
<th>Amount</th>
<th>Start-End Date</th>
<th>Responsible Agency</th>
</tr>
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<tbody>
<tr>
<td>13D005</td>
<td>Comprehensive Evaluation Clinic for Mentally Retarded Children, Dekalb District 036, State Department of Public Health, Atlanta</td>
<td>Georgia</td>
<td>$89,950</td>
<td>7/1/69-6/30/70</td>
<td>HSMHA-MCHS</td>
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<tr>
<td>13D010</td>
<td>Comprehensive Evaluation Clinic for Mentally Retarded Children, Catham State Department of Public Health, Atlanta</td>
<td>Georgia</td>
<td>$86,750</td>
<td>7/1/69-6/30/70</td>
<td>HSMHA-MCHS</td>
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<td>13D020</td>
<td>Comprehensive Evaluation for Mentally Retarded Children, Muscogee State Department of Public Health, Atlanta</td>
<td>Georgia</td>
<td>$53,321</td>
<td>7/1/69-6/30/70</td>
<td>HSMHA-MCHS</td>
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<td>13D025</td>
<td>Initial Staffing, Atlanta Association for Retarded Children, Atlanta</td>
<td>Georgia</td>
<td>$87,510</td>
<td>7/1/69-6/30/70</td>
<td>SRS-DMR</td>
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<td>13D027</td>
<td>Initial Staffing, Griffin Area Chapter for Retarded Children, Griffin</td>
<td>Georgia</td>
<td>$44,142</td>
<td>12/1/68-2/29/72</td>
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<td>13D030</td>
<td>Initial Staffing, Dekalb-Rockdale Health District, Decatur</td>
<td>Georgia</td>
<td>$58,398</td>
<td>1/7/69-8/31/71</td>
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<td>13D036</td>
<td>Initial Staffing, Georgia Association for Retarded Children, Columbus</td>
<td>Georgia</td>
<td>$127,433</td>
<td>9/1/69-8/31/71</td>
<td>SRS-DMR</td>
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<td>13D037</td>
<td>Initial Staffing Elbert County Board of Health, Elberton</td>
<td>Georgia</td>
<td>$17,265</td>
<td>8/1/69-7/31/71</td>
<td>SRS-DMR</td>
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<td>13D038</td>
<td>Initial Staffing Board of Commissioners of Fulton County, Atlanta</td>
<td>Georgia</td>
<td>$153,931</td>
<td>8/1/69-7/31/71</td>
<td>SRS-DMR</td>
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<td>13D040</td>
<td>Multidisciplinary Approach to the Disturbed Retardate, Georgia Department of Public Health, Atlanta</td>
<td>Georgia</td>
<td>$270,215</td>
<td>6/1/69-7/30/71</td>
<td>SRS-DMR</td>
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<td>13D044</td>
<td>Student Work Experience and Training Georgia Department of Public Health, Atlanta</td>
<td>Georgia</td>
<td>$12,120</td>
<td>6/1/69-7/30/71</td>
<td>SRS-DMR</td>
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<td>13D045</td>
<td>Project Rescue Atlanta Association for Retarded Children, Atlanta</td>
<td>Georgia</td>
<td>$56,665</td>
<td>FY 1969</td>
<td>SRS-RSA</td>
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**Construction**

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<tr>
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<th>Amount</th>
<th>Start-End Date</th>
<th>Responsible Agency</th>
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<tbody>
<tr>
<td>13C005</td>
<td>Community Facilities Construction, Hi-Hope Training Center for Mental Retardation, Lawrenceville,</td>
<td>Georgia</td>
<td>$208,680</td>
<td>1/69-6/30/71</td>
<td>SRS-DMR</td>
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<tr>
<td>13C010</td>
<td>Griffin Area Chapter for Retarded Children, Griffin</td>
<td>Georgia</td>
<td>$52,950</td>
<td>6/16/69-7/21/70</td>
<td>SRS-RSA</td>
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**Other**

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<tbody>
<tr>
<td>13D005</td>
<td>Atlanta Adult Activity Center Association for Retarded Children, Atlanta</td>
<td>Georgia</td>
<td>$66,270</td>
<td>7/1/69-7/31/70</td>
<td>SRS-DMR</td>
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<tr>
<td>13D006</td>
<td>Activity Program for Institutionalized Multi-Handicapped Retardates Georgia Dept. of Public Health, Atlanta</td>
<td>Georgia</td>
<td>$127,700</td>
<td>6/1/69-7/30/71</td>
<td>SRS-DMR</td>
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</tbody>
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### Guam

#### Training

<table>
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<tr>
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**Construction**

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<tr>
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<tbody>
<tr>
<td>14C005</td>
<td>Community Facilities Construction, Brantley Center, Hanoi</td>
<td>Guam</td>
<td>$81,652</td>
<td>10/66-11/66</td>
<td>SRS-DMR</td>
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</tbody>
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### Hawaii

#### Training

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<tbody>
<tr>
<td>15B010</td>
<td>Field Work Instruction in Medical Social Work University of Hawaii, Honolulu</td>
<td>Hawaii</td>
<td>$27,226</td>
<td>5/1/70-4/30/71</td>
<td>SRS-RSA</td>
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<tr>
<td>15B011</td>
<td>Inservice Training-Mental Retardation Waimano Training School and Hospital</td>
<td>Hawaii</td>
<td>$27,400</td>
<td>7/1/70-4/30/71</td>
<td>SRS-DMR</td>
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<tr>
<td>15B020</td>
<td>Preparation of Professional Personnel in the Education of Handicapped Children</td>
<td>Hawaii</td>
<td>$122,400</td>
<td>7/1/70-4/30/71</td>
<td>SRS-DMR</td>
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<td>15B021</td>
<td>Training Grant in Mental Retardation University of Hawaii, Honolulu</td>
<td>Hawaii</td>
<td>$17,400</td>
<td>6/1/70-8/31/71</td>
<td>SRS-RSA</td>
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**Construction**

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<tr>
<td>15C005</td>
<td>Community Facilities Construction, Brantley Center, Hanoi</td>
<td>Hawaii</td>
<td>$81,652</td>
<td>10/66-11/66</td>
<td>SRS-DMR</td>
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</table>
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

OTHER

15D005 DAY ACTIVITY PROGRAM, BIG ISLAND ASSOCIATION TO HELP RETARDED CHILDREN, HILA
6/1/70-8/31/71, RENEWAL, $10,100. OIE

15D010 EVALUATION CLINICS FOR MENTALLY RETARDED CHILDREN, HONOLULU STATE DEPARTMENT OF HEALTH, HONOLULU
7/1/68-6/30/69, RENEWAL, $139,998. SRS-CB

15D014 STUDENT WORK EXPERIENCE AND TRAINING HAWAII ASSOCIATION TO HELP RETARDED CHILDREN 6/1/70-8/31/70 INITIAL $5,000. SRS-DMR

15D015 HABILITATION OF SEVERELY RETARDED HYPERACTIVE MALES, WAIMANO TRAINING SCHOOL AND HOSPITAL, PEARL CITY
6/1/70-8/31/7! CONTINUATION $47,500. SRS-DMR

15D020 INTENSIVE PROGRAM FOR COMMUNITY PLACEMENT, WAIMANO TRAINING SCHOOL AND HOSPITAL, PEARL CITY
6/1/70-8/31/71, RENEWAL, $30,087. SRS-DMR

15D025 MR INITIAL STAFFING, GOODWILL INDUSTRIES OF HONOLULU INC, HONOLULU
7/1/70-9/30/71 INITIAL $5,568. SRS-DMR

15D026 MR INITIAL STAFFING BRANTLEY CENTER INC, HONOKA
9/1/69-8/31/71 INITIAL $8,775. SRS-DMR

15D030 MR INITIAL STAFFING, SPECIAL EDUCATION CENTER OF OAHU
7/1/70-8/31/71 INITIAL $6,815. SRS-DMR

15D035 MR INITIAL STAFFING, MENTAL HEALTH, IDAHO DEPARTMENT OF HEALTH, BOISE
9/1/70-8/31/71 CONTINUATION $10,317. SRS-DMR

15D040 MR INITIAL STAFFING REHABILITATION UNLIMITED KAUAI, KAPA
7/1/69-8/31/71 INITIAL $8,910. SRS-DMR

IDAHO

TRAINING

I6B003 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN IDAHO DEPARTMENT OF EDUCATION, BOISE
6/1/70-8/31/71, RENEWAL, $10,100. OIE

I6B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF IDAHO, MOSCOW
6/1/70-8/31/71, RENEWAL, $20,500. OIE

I6B025 TRAINING FOR ATTENDANT, NURSE, AND AIDE PERSONNEL, IDAHO STATE SCHOOL AND HOSPITAL, NAMPA
7/1/70-8/31/71 CONSTRUCTION $23,104. SRS-DMR

CONSTRUCTION

16C005 COMMUNITY FACILITIES CONSTRUCTION PANCHHANDLE HEALTH CENTER, CUKUR D'ALENE
6/1/70 INITIAL $119,600. SRS-DMR

OTHER

16D005 COMMUNITY MENTAL RETARDATION PROGRAM AND GENETICS LABORATORY, BOISE STATE DEPARTMENT OF HEALTH, BOISE
7/1/68-6/30/69, RENEWAL, $97,900. SRS-CB

16D010 HOME LIVING TRAINING PROGRAM, GOAL HABILITATION, IDAHO STATE SCHOOL AND HOSPITAL, NAMPA
2/1/69-8/31/71 CONTINUATION $95,000. SRS-DMR

16D011 MR INITIAL STAFF IDAHO DEPT. OF HEALTH, BOISE
7/1/69-8/30/71 INITIAL $25,889. SRS-DMR

16D012 MR INITIAL STAFFING IDAHO DEPT. OF HEALTH, BOISE
9/1/70-8/31/71 INITIAL $30,684. SRS-DMR

16D015 MR INITIAL STAFFING, IDAHO DEPARTMENT OF HEALTH, BOISE
9/1/70-8/31/71 CONTINUATION $1,847.2 SRS-DMR

16D020 PROJECT DEVELOPMENT, CHILD DEVELOPMENT CENTER, TWIN FALLS
6/1/70-1/31/71, INITIAL, $6,500. SRS-RSA

ILLINOIS

TRAINING

17B005 MENTAL HEALTH CAREER DEVELOPMENT PROGRAM MR A.L. BOWEN CHILDRENS CENTER, HARRISBURG
7/1/70-8/30/71, RENEWAL, $23,747. SRS-DMR

17B020 FIELD INSTRUCTION IN RECREATION FOR RETARDED SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE
6/1/70-5/31/71, RENEWAL, $8,942. SRS-RSA

17B021 HUMAN BIOCHEMICAL GENETICS, CHILDREN MEMORIAL HOSPITAL, CHICAGO, ILLINOIS,
7/70-6/71, CONTINUATION, $33,539. NICHD

17B026 NORMAL AND RETARDED DEVELOPMENT UNIVERSITY OF ILLINOIS, URBANA, ILLINOIS,
7/70-6/71, CONTINUATION, $38,156. NICHD

17B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN CHICAGO STATE COLLEGE, CHICAGO
6/1/70-8/31/71, RENEWAL, $17,400. OIE

17B031 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN ILLINOIS STATE UNIVERSITY, NORMAL
6/1/70-8/31/71, RENEWAL, $22,200. OIE

17B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN ILLINOIS STATE UNIVERSITY, NORMAL
6/1/70-8/31/71, RENEWAL, $38,200. OIE

17B045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN OFFICE OF THE SUPERINTENDENT OF PUBLIC INSTRUCTION, SPRINGFIELD
6/1/70-8/31/71, RENEWAL, $34,000. OIE

17B050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SOUTHERN ILLINOIS UNIVERSITY, CARBONDALE
6/1/70-8/31/71, RENEWAL, $35,800. OIE

17B060 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SOUTHERN ILLINOIS UNIVERSITY, EDWARDSVILLE
6/1/70-8/31/71, RENEWAL, $11,300. OIE

17B070 SPECIAL PROJECTS, A PROGRAM TO PREPARE CORPS MEMBERS TO TEACH DISADVANTAGED EDUCABLE MENTALLY HANDICAPPED CHILDREN IN THE INNER CITY ELEMENTARY SCHOOLS OF CHICAGO, THE CHICAGO CONSORTIUM, CHICAGO, ILLINOIS, 6/1/70-8/31/71, INITIAL, $100,000. OIE

CONSTRUCTION

17C005 COMMUNITY FACILITIES CONSTRUCTION DR SIDNEY KLEIN MATURET HOSPITAL AND KONSTADER CHILDREN'S CENTER, ILLINOIS
6/25/70 INITIAL $160,871. SRS-DMR

17C010 COMMUNITY FACILITIES CONSTRUCTION YOUNG MENS JEWISH COUNCIL SPECIAL SERVICE CENTER, ILLINOIS
6/25/70 INITIAL $169,087. SRS-DMR
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

17D015 COMMUNITY FACILITIES CONSTRUCTION IROQUOIS
       FRIENDSHIP HOUSE, WATSEKA
       6/1/70-6/30/71, INITIAL $241,185, SRS-DMR

OTHER

17D005 CHILD DEVELOPMENT CLINIC, CHILDREN'S MEMORIAL
       HOSPITAL, CHICAGO STATE DEPARTMENT OF PUBLIC
       HEALTH, SPRINGFIELD
       7/1/69-6/30/70, CONTINUATION, $50,000. HSMHA-MCHS

17D010 COTTAGE PROGRAMMING FOR THE PROFOUNDLY AND
       SEVERELY RETARDED, DIXON STATE SCHOOL,
       DIXON
       6/1/70-5/31/71, CONTINUATION $60,100. SRS-DMR

17D012 DEMONSTRATION OF NEW PATHWAYS FOR SERVICES
       TO THE HOMEBOUND MENTALLY RETARDED,
       CHICAGO
       6/1/70-5/31/71, CONTINUATION $84,530. SRS-DMR

17D013 FACILITY IMPROVEMENT, CHICAGO SCHOOL FOR
       RETARDED CHILDREN, CHICAGO
       3/1/70-2/28/71, INITIAL, $14,875. SRS-RSA

17D014 FACILITY IMPROVEMENT, KENNEDY JOB TRAINING
       CENTER, PALOS
       6/29/70-9/30/71, INITIAL, $11,691. SRS-RSA

17D015 EVALUATION AND THERAPEUTIC CENTER FOR
       MULTIPLE HANDICAPPED CHILDREN, MICHAEL
       REESE HOSPITAL, CHICAGO UNIVERSITY OF ILLINOIS,
       CHICAGO
       7/1/69-6/30/70, CONTINUATION, $90,000. HSMHA-MCHS

17D017 FACILITY IMPROVEMENT, AURORA ACADEMIC
       ASSOCIATION FOR THE MENTALLY RETARDED, AURORA
       5/1/70-5/14/71, INITIAL, $23,000. SRS-DMR

17D020 FACILITY IMPROVEMENT GRANT CHICAGO
       ASSOCIATION FOR RETARDED CHILDREN, CHICAGO
       4/1/70-3/31/71, CONTINUATION, $26,526. SRS-RSA

17D022 INITIAL STAFFING, JEWISH VOCATIONAL SERVICE
       OF CHICAGO, CHICAGO
       9/1/69-11/30/70, INITIAL, $67,323. SRS-RSA

17D025 INTENSIVE TRAINING FOR SEVERELY RETARDED
       CHILDREN, WARRENG MURRAY CHILDREN'S CENTER,
       CENTRALIA
       1/1/70-12/31/70, CONTINUATION $94,373. SRS-DMR

17D035 MR INITIAL STAFFING, CHAMPAIGN CO. ASSOC.
       FOR THE MENTALLY RETARDED, CHAMPAIGN
       7/1/70-8/31/71, CONTINUATION $7,803. SRS-DMR

17D036 MR INITIAL STAFFING CHICAGO ASSOCIATION
       FOR RETARDED CHILDREN, CHICAGO
       7/1/70-6/30/71, INITIAL $24,630. SRS-DMR

17D040 MR INITIAL STAFFING, CHICAGO BOARD OF HEALTH,
       CHICAGO
       7/1/70-6/30/71, CONTINUATION $27,617. SRS-DMR

17D045 MR INITIAL STAFFING, CLEAR BROOK CENTER FOR
       THE RETARDED, ROLLING MEADOWS
       7/1/70-6/30/71, CONTINUATION $56,747. SRS-DMR

17D050 MR INITIAL STAFFING, COLES COUNTY ASSOCIATION
       FOR THE RETARDED, MATTOON
       9/1/70-3/31/71, CONTINUATION $41,127. SRS-DMR

17D051 MR INITIAL STAFFING COLES COUNTY ASSOCIATION
       FOR THE RETARDED, CHICAGO
       7/1/70-6/30/71, INITIAL $62,250. SRS-DMR

17D055 MR INITIAL STAFFING, COMMUNITY MENTAL HEALTH
       BOARD OF MACON COUNTY, DECATUR
       7/1/70-6/30/71, CONTINUATION $25,618. SRS-DMR

17D065 MR INITIAL STAFFING, JACKSON CO. WORK ACTIVITY
       CENTER FOR THE MR, MURPHYSBORO
       7/1/70-6/30/71, CONTINUATION $8,165. SRS-DMR

17D075 MR INITIAL STAFFING, LUTHERAN WELFARE SERVICES
       OF ILLINOIS, CHICAGO
       7/1/70-6/30/71, CONTINUATION $32,558. SRS-DMR

17D080 MR INITIAL STAFFING, MICHAEL REESE HOSPITAL,
       CHICAGO
       7/1/70-3/31/71, CONTINUATION $28,209. SRS-DMR

17D085 MR INITIAL STAFFING, PEORIA ASSOCIATION FOR
       RETARDED CHILDREN, PEORIA
       7/1/70-6/30/71, CONTINUATION $42,968. SRS-DMR

17D090 MR INITIAL STAFFING, PEORIA PROGRAM SERVICES
       CHAPTER, UCP OF NORTHWESTERN ILLINOIS, PEORIA
       7/1/70-6/30/71, CONTINUATION $15,020. SRS-DMR

17D091 MR INITIAL STAFFING UNITED CEREBRAL PALSY OF
       NORTHEASTERN ILLINOIS, DECATHUR
       7/1/70-6/30/71, CONTINUATION $19,127. SRS-DMR

17D092 MR INITIAL STAFFING UNITED CEREBRAL PALSY OF
       SOUTHERN ILL., GREENVILLE
       7/1/70-6/30/71, INITIAL $19,127. SRS-DMR

17D093 MR INITIAL STAFFING UNITED CEREBRAL PALSY OF
       LAND OF LINCOLN, SPRINGFIELD
       7/1/70-6/30/71, INITIAL $19,127. SRS-DMR

17D094 MR INITIAL STAFFING UNITED CEREBRAL PALSY OF
       SOUTHERN ILLINOIS, GREENVILLE
       7/1/70-6/30/71, INITIAL $19,127. SRS-DMR

17D096 MR INITIAL STAFFING UNITED PARENTS FOR
       EXCEPTIONAL CHILDREN, KANKAKEE
       7/1/70-6/30/71, INITIAL $13,627. SRS-DMR

17D100 MR INITIAL STAFFING, WARREN ACHIEVEMENT
       SCHOOL FOR HANDICAPPED CHILDREN, MCALESTER,
       OKLAHOMA
       9/1/70-3/31/71, CONTINUATION $15,296. SRS-DMR

17D110 PREVENTIVE INTERVENTION FOR RETARDED
       CHILDREN, ILLINOIS STATE PEDIATRIC INSTITUTE,
       CHICAGO
       7/1/70-2/28/71 CONTINUATION $25,307. SRS-DMR

17D113 PROJECT DEVELOPMENT, BI-STATE METROPOLITAN
       PLANNING COMMISSION, ROCK ISLAND
       6/29/70-6/28/71, INITIAL, $10,000. SRS-RSA

17D114 PROJECT DEVELOPMENT, DANVILLE JUNIOR COLLEGE,
       DANVILLE
       3/1/70-2/28/71, INITIAL, $7,435. SRS-RSA

17D115 STIMULATION BY INTENSIVE PHYSICAL AND ACTIVITY
       THERAPY, WILLIAM W. FOX CHILDREN'S CENTER,
       DOWNTOWN
       6/1/70-5/31/71, CONTINUATION $92,150. SRS-DMR

17D116 STUDENT WORK EXPERIENCE AND TRAINING CHICAGO
       ASSOCIATION FOR RETARDED CHILDREN, CHICAGO
       6/1/70-8/31/70, CONTINUATION $28,512. SRS-DMR

INDIANA

TRAINING

18B001 INTERDISCIPLINARY TRAINING-SPECIAL PROJECT-
       UNIVERSITY AFFILIATED FACILITY, INDIANA
       UNIVERSITY, BLOOMINGTON, INDIANA
       6/1/70-8/31/71, RENEWAL, $25,000. OE

18B002 MENTAL RETARDATION TRAINING, INDIANA
       UNIVERSITY MEDICAL CENTER, INDIANAPOLIS
       7/1/69-6/30/70, INITIAL, $201,378. HSMHA-MCHS

18B003 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
       EDUCATION OF HANDICAPPED CHILDREN BALL
       STATE UNIVERSITY, MUNCIE
       6/1/70-8/31/70, RENEWAL, $30,000. OE

18B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
       EDUCATION OF HANDICAPPED CHILDREN INDIANA
       UNIVERSITY, TERRE HAUTE
       6/1/70-8/31/71, RENEWAL, $36,100. OE

18B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
       EDUCATION OF HANDICAPPED CHILDREN INDIANA
       UNIVERSITY, BLOOMINGTON
       6/1/70-8/31/71, RENEWAL, $11,927. SRS-DMR

18B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
       EDUCATION OF HANDICAPPED CHILDREN STATE
       DEPARTMENT OF PUBLIC INSTRUCTION, INDIANAPOLIS
       6/1/70-8/31/71, RENEWAL, $11,927. SRS-DMR

18B035 TRAINING IN BASIC AND ADVANCED PSYCHIATRIC
       NURSING FOR AIDES MR MUSCATATUCK STATE
       HOSPITAL AND TRAINING CENTER, BUTLERVILLE
       7/1/70-6/30/71, CONTINUATION $14,204. SRS-DMR

CONSTRUCTION

18C005 COMMUNITY FACILITIES CONSTRUCTION STONE BELT
       CENTER, BLOOMINGTON
       8/19/69 $206,233. INITIAL SRS-DMR
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

OTHER

18D001 STUDENT WORK EXPERIENCE AND TRAINING, COUNCIL FOR RETARDED OF ST. JOSEPH COUNTY, SOUTH BEND
6/1/70-8/31/70 INITIAL $11,880. SRS-DMR

18D002 FACILITY IMPROVEMENT, SOUTHERN INDIANA RETARDATION, INC., TELL CITY
4/1/70-3/31/71, INITIAL $22,500. SRS-RSA

18D003 FACILITY IMPROVEMENT, WABASH CENTER FOR THE MENTALLY RETARDED, LAFAYETTE
4/15/70-4/14/71, INITIAL $27,331. SRS-RSA

18D010 FUNCTIONAL TRAINING PROGRAM, FORT WAYNE STATE HOSPITAL AND TRAINING CENTER, FORT WAYNE
9/1/69-8/31/70 CONTINUATION $79,273. SRS-DMR

18D015 MR INITIAL STAFFING ALLEN COUNTY ASSOC. FOR RETARDED, FORT WAYNE
9/7/80-8/31/71 INITIAL $32,643. SRS-DMR

18D018 MR INITIAL STAFFING CHILD ADULT RETARDATION SERVICES, ROCKVILLE
9/1/70-8/31/71 INITIAL $33,396. SRS-DMR

18D019 MR INITIAL STAFFING COUNCIL FOR RETARDED OF ST. JOSEPH COUNTY, SOUTH BEND
9/1/70-8/31/71 INITIAL $37,143. SRS-DMR

18D020 MR INITIAL STAFFING COUNCIL FOR THE RETARDED OF CLARK COUNTY, JEFFERSONVILLE
9/1/70-8/31/71 INITIAL $15,750. SRS-DMR

18D021 MR INITIAL STAFFING ELKHAVT COUNTY ASSOC. FOR RETARDED, ELKHART
7/1/70-6/30/71 INITIAL $9,469. SRS-DMR

18D022 MR INITIAL STAFFING COMMUNITY SHELTERED WORKSHOP OF STEUBEN COUNTY INC. PLEASANT LAKE
9/1/70-8/31/71 INITIAL $7312. SRS-DMR

18D025 MR INITIAL STAFFING, COUNCIL FOR RETARDED OF ST. JOSEPH CO., INC., SOUTH BEND
9/1/70-8/31/71 CONTINUATION $14,596. SRS-DMR

18D026 MR INITIAL STAFFING HARRISON COUNTY ASSOC. FOR RETARDED CHILDREN, PALMYRA
7/1/70-6/30/71, INITIAL $10,690. SRS-DMR

18D027 MR INITIAL STAFFING INDIANA UNIVERSITY FOUNDATION, BLOOMINGTON
7/1/70-6/30/71 INITIAL $111,282. SRS-DMR

18D031 MR INITIAL STAFFING STONE BELT COUNCIL FOR RETARDED CHILDREN, BLOOMINGTON
7/1/70-6/30/71, INITIAL $137,143. SRS-DMR

18D046 MR INITIAL STAFFING WABASH CENTER FOR MENTALLY RETARDED, LAFAYETTE
7/1/70-6/30/71 INITIAL $14,327. SRS-DMR

18D053 MR INITIAL STAFFING, MARION CO. ASSOC. FOR RETARDED CHILDREN, INC., INDIANAPOLIS
1/1/70-12/31/70, INITIAL $4,500. SRS-DMR

18D040 MR INITIAL STAFFING, MARSHALL STARKE DEVELOPMENT CENTER, PLUMMOUTH
9/1/69-8/31/70, INITIAL $12,375. SRS-DMR

18D045 MR INITIAL STAFFING, PARENTS COUNCIL FOR HAND. AND RET. CHILD. OF LAPORETO CO., MICH. CITY
7/1/69-6/30/70, INITIAL $4,806. SRS-DMR

18D030 MR INITIAL STAFFING, WAYNE CO. COUNCIL FOR RETARDED CHILDREN, INC., RICHMOND
9/1/69-8/31/70, INITIAL $28,575. SRS-DMR

18D053 NEW HORIZONS REHABILITATION AURORA
2/1/69-1/31/70, INITIAL $4,500. SRS-RSA

18D060 PARKE COUNTY ASSOCIATION FOR PARENTS AND FRIENDS OF RETARDED CHILDREN ROCKVILLE
3/1/69-2/28/70, INITIAL $4,500. SRS RSA

18D065 SELF-CARE DEVELOPMENT AND VOCATIONAL HABILITATION NEW CASTLE STATE HOSPITAL, NEW CASTLE
9/1/68-8/31/69, RENEWAL $30,156, SRS-DMR

TRAINING

19B005 CLINICAL TRAINING FOR SPEECH AND HEARING SERVICES UNIVERSITY OF IOWA, IOWA CITY
7/1/69-6/30/70, CONTINUATION $23,991. HSMHA-MCHS

19B009 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN DRACKE UNIVERSITY, DES MOINES
FY 1969, RENEWAL $17,700. OE

19B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF PUBLIC INSTRUCTION, DES MOINES
FY 1969, RENEWAL $23,500. OE

19B016 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF IOWA, IOWA CITY
FY 1969, RENEWAL $25,200. OE

19B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE UNIVERSITY OF IOWA, IOWA CITY
FY 1969, RENEWAL $28,200. OE

19B025 TRAINING FOR ATTENDANT LEVEL PERSONNEL MR GLENWOOD STATE SCHOOL, GLENWOOD
7/1/70-6/30/71 CONTINUATION $22,431. SRS-DMR

CONSTRUCTION

19C003 COMMUNITY FACILITIES CONSTRUCTION SLINKER DEVELOPMENT CENTER, DES MOINES
6/23/71 INITIAL $362,106. SRS-DMR

OTHER

19D004 STUDENT WORK EXPERIENCE AND TRAINING DEPT. OF SOCIAL SERVICES BUREAU OF MENTAL RETARDATION, DES MOINES
6/1/70-8/31/70, INITIAL $7,575. SRS-DMR

19D010 CLINICAL RESEARCH IN MENTAL RETARDATION, GENETICS STUDIES UNIVERSITY OF IOWA, IOWA CITY
7/1/69-6/30/70, CONTINUATION $57,050. HSMHA-MCHS

19D015 CLINICAL RESEARCH IN SPEECH AND LANGUAGE SKILLS OF RETARDED CHILDREN UNIVERSITY OF IOWA, IOWA CITY
7/1/69-6/30/70, CONTINUATION $42,000. HSMHA-MCHS

19D020 CLINICAL RESEARCH, STUDY AND CARE PROGRAM FOR PATIENTS WITH PHENYLKETONURIA UNIVERSITY OF IOWA, IOWA CITY
7/1/69-6/30/70, CONTINUATION $9,050. HSMHA-MCHS

19D025 FACILITY IMPROVEMENT, SOCIETY OF HOPE HAVEN SCHOOL FOR HANDICAPPED CHILDREN, ROCK VALLEY
6/1/70-5/31/71, INITIAL $27,331. SRS-RSA

19D030 FIELD CLINIC SERVICES FOR MENTALLY RETARDED PATIENTS UNIVERSITY OF IOWA, IOWA CITY
7/1/69-6/30/70, CONTINUATION $110,285. HSMHA-MCHS

19D035 FOLLOW-UP CARE OF HIGH RISK PATIENTS FOR IDENTIFICATION AND PREVENTION OF MENTAL RETARDATION
7/1/69-6/30/70, CONTINUATION $74,500. HSMHA-MCHS

19D040 INTERAGENCY CASE INFORMATION SERVICE DEPARTMENT OF SOCIAL SERVICES, DES MOINES
1/1/70-12/31/70, CONTINUATION $39,294. CHS-P

19D045 MR INITIAL STAFFING DIVISION OF REHABILITATION, EDUCATION, AND SERVICES, DES MOINES
7/1/70-6/30/71, INITIAL $13,048. SRS-DMR

19D050 MR INITIAL STAFFING, EXCEPTIONAL PERSONS, INC., WATERLOO
7/1/70-6/30/71 CONTINUATION $44,859. SRS-DMR

19D055 TRAINER-EVALUATORS FOR LOW FUNCTIONAL RETARDES, GLENWOOD STATE HOSPITAL AND SCHOOL, GLENWOOD
6/1/70-7/31/71 CONTINUATION $77,795. SRS-DMR
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

KANSAS

TRAINING

20B005 ACREAGE AND BUILDINGS AT SCHILLING AIR FORCE BASE, SALINA, KANSAS, CONVEYED TO STATE OF KANSAS, RETRANSMITTED TO CENTER FOR REHABILITATION TRAINING FACILITY FOR MENTALLY AND PHYSICALLY HANDICAPPED. 10/4/69, INITIAL, $173,712. OSPU

20B010 CHILDREN'S REHABILITATION UNIT UNIVERSITY OF KANSAS, LAWRENCE, KANSAS 7/1/69-6/30/69, RENEWAL, $254,100. SRS-CB

20B011 ADULT EDUCATION METHODS APPLIED TO INSERVICE TRAINING KANSAS NEUROLOGICAL INSTITUTE, TOPEKA 6/1/70-5/31/71 INITIAL $32,442. SRS-DMR

20B012 MENTAL RETARDATION, UNIVERSITY OF KANSAS, LAWRENCE, KANSAS 7/7/60-6/30/71, RENEWAL, $155,579. NICH

20B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN FORT HAYS KANSAS STATE COLLEGE, HAYS FY 1969, RENEWAL, $30,285. OE

20B016 DEVELOPMENTAL AND CHILD PSYCHOLOGY, UNIVERSITY OF KANSAS, LAWRENCE, KANSAS 7/7/60-6/30/71, RENEWAL, $46,539. NICH

20B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN KANSAS STATE TEACHER'S COLLEGE, EMPORIA 6/1/70-8/31/71, RENEWAL, $52,600. OE

20B021 INTERDISCIPLINARY TRAINING-SPECIAL PROJECT, UNIVERSITY AFFILIATED FACILITY, UNIVERSITY OF KANSAS, LAWRENCE, KANSAS 6/1/70-8/31/71, RENEWAL, $21,000. OE

20B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF PUBLIC INSTRUCTION, TOPEKA 6/1/70-8/31/71, RENEWAL, $15,812. OE

20B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF KANSAS, LAWRENCE 6/1/70-8/31/71, RENEWAL, $57,100. OE

20B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN WICHITA STATE UNIVERSITY, WICHITA 6/1/70-8/31/71, RENEWAL, $12,000. OE

20B036 STUDENT WORK EXPERIENCE AND TRAINING NORTON STATE HOSPITAL, NORTON 6/1/70-5/31/71 INITIAL $34,980. SRS-DMR

20B040 TRAINEE CARE OF ADULT RETARDEES MR WINFIELD STATE HOSPITAL AND TRAINING CENTER, WINFIELD 7/1/69-6/30/70, RENEWAL $16,906. SRS-DMR

20B045 TRAINEE CARE AIDES, REGISTERED NURSES AND PSYCHIATRIC AIDES MR KANSAS NEUROLOGICAL INSTITUTE, TOPEKA 7/1/69-6/30/70, RENEWAL, $15,318. SRS-DMR

20B046 MENTAL RETARDATION HOSPITAL AND TRAINING CENTER WINFIELD STATE HOSPITAL AND TRAINING CENTER, WINFIELD 7/1/70-6/30/71 INITIAL $24,236. SRS-DMR

KENTUCKY

TRAINING

21B003 CHILD WITH MULTIPLY HANDICAPPING CONDITIONS: EFFECTIVE NURSE-CHILD COMMUNICATIONS, UNIVERSITY OF LOUISVILLE, LOUISVILLE 7/1/69-5/31/70, INITIAL, $2,000. HSMHA-MCHS

21B005 TRAINING IN EFFECTIVE NURSE-CHILD COMMUNICATIONS, UNIVERSITY OF LOUISVILLE, LOUISVILLE 7/1/69-5/31/70, INITIAL, $2,000. HSMHA-MCHS

21B006 INTER-DEPARTMENTAL STAFF DEVELOPMENT TRAINING OUTWOOD HOSPITAL AND SCHOOL 5/1/70-4/30/71, INITIAL $24,300. SRS-DMR
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

21B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN BRESCIA COLLEGE, OWENSBORO 6/1/70-8/31/71, RENEWAL, $11,800. OE

21B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN MURRAY STATE UNIVERSITY, MURRAY 6/1/70-8/31/71, RENEWAL, $14,000. OE

21B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, FRANKFORT 6/1/70-8/31/71, RENEWAL, $48,000. OE

21B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF KENTUCKY, LEXINGTON 6/1/70-8/31/71, RENEWAL, $60,100. OE

21B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF LOUISVILLE, LOUISVILLE 6/1/70-8/31/71, RENEWAL, $35,500. OE

21B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN BELLARINE-URSULINE COLLEGE, LOUISVILLE, KENTUCKY 6/1/70-8/31/71, RENEWAL, $14,600. OE

21B038 THE ROLE OF THE NURSE IN CARING FOR CHILDREN WITH MULTIPLE HANDICAPS, UNIVERSITY OF KENTUCKY, LEXINGTON 7/1/69-12/31/69, INITIAL, $3,500. HSMHA-MCHS

21B040 TRAINING FOR SUPERVISORY STAFF AND ATTENDANT PERSONNEL MR FRANKFORT STATE HOSPITAL AND SCHOOL, FRANKFORT 7/1/70-6/30/71, CONTINUATION $24,300. SRS-DMR

CONSTRUCTION

21C005 CHILD EVALUATION CENTER, UNIVERSITY OF LOUISVILLE STATE DEPARTMENT OF HEALTH, FRANKFORT 7/1/69-6/30/70, CONTINUATION, $197,500. HSMHA-MCHS

OTHER

21D005 ADULT ACTIVITY PROGRAM FOR MODERATELY AND SEVERELY RETARDED 10TH REGION MENTAL HEALTH AND MENTAL RETARDATION BOARD, PRESTONBURG 6/25/70-6/30/71, INITIAL $35,295. SRS-DMR

21D006 EXPERIENCE CENTERS FOR MODERATE AND SEVERELY RETARDED OUTWOOD HOSPITAL AND SCHOOL, DAWSON SPRINGS 1/1/70-12/31/70, INITIAL $62,974. SRS-DMR

21D010 INTENSIVE TEAM APPROACH TO PROBLEM SOLVING FRANKFORT STATE HOSPITAL AND SCHOOL, FRANKFORT 1/1/70-12/31/70, INITIAL $99,000. SRS-DMR

21D015 MR INITIAL STAFFING, BLUE GRASS ASSOCIATION FOR MENTAL RETARDATION, INC., LEXINGTON 9/1/70-8/31/71, CONTINUATION $18,500. SRS-DMR

21D016 MR INITIAL STAFFING, BRESCIA COLLEGE, OWENSBORO 7/1/70-6/30/71, INITIAL $9,000. SRS-DMR

21D017 MR INITIAL STAFFING CAYE RUN REGIONAL MH-MR BOARD, MOREHEAD 9/1/70-8/31/71, INITIAL $9,000. SRS-DMR

21D020 MR INITIAL STAFFING, GREEN RIVER REGIONAL MH-MR BOARD, OWENSBORO 7/1/70-6/30/71, INITIAL $59,830. SRS-DMR

21D025 MR INITIAL STAFFING, NORTHERN KENTUCKY MH-MR BOARD, COVINGTON 7/1/70-6/30/71, INITIAL $56,625. SRS-DMR

21D030 MR INITIAL STAFFING, KENTON CAMPBELL ASSOC. FOR THE MENTALLY RETARDED, INC., NEWPORT 9/1/70-8/31/71, CONTINUATION $21,125. SRS-DMR

21D031 MR INITIAL STAFFING, NINETEENTH REGIONAL MH-MR BOARD, ASHLAND 7/1/70-6/30/71, INITIAL $24,750. SRS-DMR

21D032 MR INITIAL STAFFING, NORTH CENTRAL REGIONAL MH-MR BOARD, ELIZABETHTOWN 7/1/70-6/30/71, INITIAL $18,478. SRS-DMR

21D033 MR INITIAL STAFFING, MAMMOTH CAVE MH-MR BOARD, GLASGOW 8/1/70-7/31/71, INITIAL $15,750. SRS-DMR

21D034 MR INITIAL STAFFING, REGION V MH-MR BOARD, BOWLING GREEN 8/1/70-7/31/71, INITIAL $7,500. SRS-DMR

21D035 MR INITIAL STAFFING, PENNYROYAL REGIONAL MH-MR BOARD, HOPKINSVILLE 7/1/70-6/30/71, RENEWAL, $23,500. SRS-DMR

21D036 MR INITIAL STAFFING, REGION 20 MH-MR BOARD, PRESTONBURG 7/1/70-6/30/71, INITIAL $21,300. SRS-DMR

21D037 MR INITIAL STAFFING, REGION 12 LAKE CUMBERLAND MH-MR BOARD, SOMERSET 7/1/70-6/30/71, INITIAL $18,750. SRS-DMR

21D038 MR INITIAL STAFFING, SOUTHERN BLUEGRASS MH-MR BOARD, DANVILLE 7/1/70-6/30/71, INITIAL $12,750. SRS-DMR

21D040 PROGRAM PLANNING IN HOME ECONOMICS FOR EDUCABLES, OUTWOOD HOSPITAL AND SCHOOL, DAWSON SPRINGS 1/1/70-12/31/70, CONTINUATION, $26,007. SRS-DMR

21D045 TRAINING SERVICES GRANT, OPPORTUNITY WORKSHOP OF LEXINGTON, INC., LEXINGTON 6/15/70-6/4/71, CONTINUATION, $65,936. SRS-RSA

LOUISIANA

TRAINING

22B005 FIELD INSTRUCTION OF SOCIAL WORK STUDENTS LOUISIANA STATE UNIVERSITY, BATON ROUGE 9/1/68-8/31/69, RENEWAL, $21,914. SRS-RSA

22B010 FIELD INSTRUCTION OF SOCIAL WORK STUDENTS TULANE UNIVERSITY, NEW ORLEANS 9/1/68-8/31/69, RENEWAL, $29,375. SRS-RSA

22B015 INSERVICE TRAINING PROGRAM FOR COTTAGE PARENTS MR RUSTON STATE SCHOOL, RUSTON 7/1/70-6/30/71, CONTINUATION $22,469. SRS-DMR

22B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN GRAMBLING COLLEGE, GRAMBLING 6/1/70-8/31/71, RENEWAL, $17,700. OE

22B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN LOUISIANA POLYTECHNIC INSTITUTE, RUSTON 6/1/70-8/31/71, RENEWAL, $15,000. OE

22B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN LOUISIANA STATE UNIVERSITY AND A&M COLLEGE, BATON ROUGE 6/1/70-8/31/71, RENEWAL, $37,100. OE

22B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SOUTHERN UNIVERSITY AND A&M COLLEGE, BATON ROUGE, LOUISIANA, 6/1/70-8/31/71, RENEWAL, $14,600. OE

22B045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN LOUISIANA STATE UNIVERSITY, NEW ORLEANS 6/1/70-8/31/71, RENEWAL, $37,100. OE

22B050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, BATON ROUGE 6/1/70-8/31/71, RENEWAL, $68,654. OE

22B055 STAFF DEVELOPMENT THROUGH ADMINISTRATIVE AND SUPERVISORY TRAINING BELLE CHASSE STATE SCHOOL, BELLE CHASSE 7/1/70-6/30/71, CONTINUATION $17,698. SRS-DMR

22B060 TRAINING ATTENDANT PSYCHIATRIC AIDES AND NURSING AIDE PERSONNEL MR PINECREST STATE SCHOOL, PINEVILLE 7/1/70-6/30/71, CONTINUATION $23,750. SRS-DMR

CONSTRUCTION

22C002 COMMUNITY FACILITIES CONSTRUCTION, BELLE CHASSE STATE SCHOOL, BELLE CHASSE
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

MAINE

TRAINING

23B005 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, FARMINGTON STATE TEACHER'S COLLEGE, FARMINGTON
6/1/70-8/31/71, RENEWAL, $19,400, OE

23B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, AUGUSTA
6/1/70-8/31/71, RENEWAL, $26,000, OE

23B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, UNIVERSITY OF MAINE, ORONO
6/1/70-8/31/71, RENEWAL, $29,400, OE

23B020 TRAINING PROGRAM FOR NURSING SERVICE PERSONNEL, MR PINELAND HOSPITAL AND TRAINING CENTER, POWNAL
7/1/70-6/30/71, RENEWAL, $20,400, OE

OTHER

23D002 MR INITIAL STAFFING ABILITIES AND GOODWILL, PORTLAND
7/1/70-6/30/71, CONTINUATION, $42,000. SRS-DMR

23D003 DIAGNOSTIC AND EVALUATION CENTER FOR MENTALLY RETARDED CHILDREN, AUGUSTA
7/1/69-6/30/70, CONTINUATION, $40,000. HSMHA-MCHS

23D009 MR INITIAL STAFFING DEPARTMENT OF MENTAL HEALTH AND CORRECTIONS, AUGUSTA
7/1/70-6/30/71, CONTINUATION, $100,000. SRS-DMR

23D010 MR INITIAL STAFFING, EASTERN MAINE FRIENDS FOR RETARDED CHILDREN, INC., BANGOR
7/1/70-6/30/71, CONTINUATION, $52,000. SRS-DMR

23D011 MR INITIAL STAFFING EASTERN MAINE FRIENDS FOR RETARDED CHILDREN, INC., BANGOR
7/1/70-6/30/71, CONTINUATION, $11,000. SRS-DMR

23D015 MR INITIAL STAFFING, GREATER AUGUSTA RETARDED CHILDREN'S CENTER, INC., AUGUSTA
7/1/70-6/30/71, CONTINUATION, $10,000. SRS-DMR

23D021 SOCIAL REHABILITATION OF THE SEVERELY AND MENTALLY ILL AND TRAINABLE RETARDED CHILDREN, POWNAL
6/1/70-6/30/71, CONTINUATION, $10,000. SRS-DMR

MARYLAND

TRAINING

24B012 INTERDISCIPLINARY TRAINING SPECIAL PROJECT, UNIVERSITY OF MARYLAND, BALTIMORE
7/1/70-6/30/71, RENEWAL, $20,000, OE

24B015 MULTI-DISCIPLINE PROGRAM FOR CARE OF MENTALLY RETARDED CHILDREN, HENRYTON
7/1/70-6/30/71, CONTINUATION, $19,924. SRS-DMR

24B017 NATIONAL CONFERENCE ON SOCIAL WORK, BALTIMORE"
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

25D005 25C005

COMMUNITY FACILITIES CONSTRUCTION ST. COLETTA DAY SCHOOL, BRAINTREE 6/30/70 INITIAL $263,504. SRS-DMR

25D005 25C005

COMMUNITY FACILITIES CONSTRUCTION ST. COLETTA DAY SCHOOL, BRAINTREE 6/30/70 INITIAL $263,504. SRS-DMR

OTHER

25D005 25D005

A CHILD EXPERIENCE ENRICHMENT PROGRAM, PAUL A DEVER STATE SCHOOL, TAUNTON 12/1/69-11/30/70 CONTINUATION $54,773. SRS-DMR

25D010 25D010

AN IMPROVED PROGRAM FOR HABILITATION OF THE RETARDED, BELCHERTOWN STATE SCHOOL, BELCHERTOWN 1/1/70-12/31/70 CONTINUATION $32,512. SRS-DMR

25D020 25D000

CHILDREN'S DEVELOPMENTAL CLINIC, CAMBRIDGE STATE DEPARTMENT OF PUBLIC HEALTH, BOSTON 7/1/68-6/30/69, RENEWAL, $135,608 SRS-CB

25D025 25D025

EXPANDED SCREENING STUDY FOR GALACTOSEMIA AND OTHER METABOLIC DISORDERS, BOSTON STATE DEPARTMENT OF PUBLIC HEALTH, BOSTON 7/1/69-6/30/70, CONTINUATION, $159,320. HSMHA-MCHS

25D028 25D028

FACILITY IMPROVEMENT, MORGAN MEMORIAL, INC., BOSTON 8/2/70-8/31/71, INITIAL $20,000. SRS-RSA

25D030 25D030

FACILITY IMPROVEMENT, SUNSHINE VILLAGE, CHICOPEE FALLS 6/29/70-6/30/70, INITIAL, $32,051. SRS-RSA

25D040 25D040

MR INITIAL STAFFING SELF-HLP, INC, BROCKTON 9/1/70-9/30/71 INITIAL $36,062. SRS-DMR

25D045 25D045

MR INITIAL STAFFING SOUTH MIDDLESEX ASSOC. FOR RETARDED CHILDREN, FRAMINGHAM 9/17/70-6/30/71 INITIAL $5,764. SRS-DMR

25D045 25D045

MR INITIAL STAFFING SOUTH MIDDLESEX ASSOC. FOR RETARDED CHILDREN, FRAMINGHAM 9/17/70-6/30/71 INITIAL $5,764. SRS-DMR

25D060 25D060

PKU COLLABORATIVE STUDY NEW ENGLAND DEACONESS HOSPITAL, BOSTON 7/1/69-6/30/70, CONTINUATION, $36,099. HSMHA-MCHS

25D062 25D062

TRAINING SERVICES GRANT, SPRINGFIELD GOODWILL INDUSTRIES, SPRINGFIELD 6/25/70-6/24/71, CONTINUATION, $150,431. SRS-RSA

25D063 25D063

STUDY WORK EXPERIENCE AND TRAINING BEHAVIORAL EDUCATION PROJECTS, BOSTON 6/15/70-9/30/70, CONTINUATION $2,500. SRS-RSA

25D065 25D065

TRAINING SEVERELY RETARDED ADULTS FROM THE BACKWARDS, WALTER E FERNALD STATE SCHOOL, WAVERLEY 9/1/69-8/31/70 CONTINUATION $57,083. SRS-DMR

25D067 25D067

TRAINING THE UNTRAINABLE, WRENTHAM STATE SCHOOL, WRENTHAM 9/1/69-8/31/70 CONTINUATION $64,013. SRS-DMR

25D067 25D067

TRAINING THE UNTRAINABLE, WRENTHAM STATE SCHOOL, WRENTHAM 9/1/69-8/31/70 CONTINUATION $64,013. SRS-DMR

MICHIGAN

TRAINING

26B001 26B001

APPRAISAL CENTER FOR MULTIPLE HANDICAPPED CHILDREN, CHILDREN'S HOSPITAL, DETROIT STATE DEPARTMENT OF PUBLIC HEALTH, LANSING 7/1/69-6/30/70, CONTINUATION $108,200. HSMHA-MCHS

26B003 26B003

CONFERENCE ON THE ROLE OF MCH AND CC PROGRAMS IN EVOLVING SYSTEMS OF HEALTH CARE FOR MOTHERS, CHILDREN AND THE MENTALLY AND PHYSICALLY HANDICAPPED, UNIVERSITY OF MICHIGAN, ANN ARBOR 7/1/68-6/30/70, INITIAL $17,000. HSMHA-MCHS

26B005 26B005

CONTINUING EDUCATION FOR JUDGES ON MENTAL RETARDATION UNIVERSITY OF MICHIGAN, ANN ARBOR 9/1/70-6/30/70 INITIAL $10,000. SRS-DMR

OTHER

26B001 26B001

FIELD INSTRUCTION OF REHABILITATION COUNSELING STUDENTS MICHIGAN STATE UNIVERSITY, EAST LANSING 9/1/69-8/31/70, RENEWAL, $65,464. SRS-RSA

26B007 26B007

FIELD INSTRUCTION OF SPEECH PATHOLOGY AND AUDIOLOGY MICHIGAN STATE UNIVERSITY, EAST LANSING 9/1/69-8/31/70, RENEWAL, $27,374. SRS-RSA

26B008 26B008

FIELD INSTRUCTION OF SOCIAL WORK STUDENTS UNIVERSITY OF MICHIGAN, ANN ARBOR
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

MINNESOTA

TRAINING

27B004 CHILD DEVELOPMENT TECHNICIAN TRAINING PROGRAM ST. MARY'S JUNIOR COLLEGE, MINNEAPOLIS
7/1/70-6/30/71 INITIAL $47,152. SRS-DMR

27B005 CHILD DEVELOPMENT TECHNICIAN TRAINING PROGRAM ST. MARY'S JUNIOR COLLEGE, MINNEAPOLIS
7/1/70-6/30/71, CONTINUATION, $43,094. CHS-P

27B006 HOSPITAL STAFF DEVELOPMENT BRAINERD STATE HOSPITAL, BRAINERD
7/1/70-6/30/71 INITIAL $22,492. SRS-DMR

27B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN ST. CLOUD STATE COLLEGE, ST. CLOUD, MINNESOTA, 6/1/70-6/30/71, RENEWAL, $28,000. OE

27B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN MANKATO STATE COLLEGE, MANKATO
6/1/70-6/30/71, RENEWAL, $28,000. OE

27B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, ST. PAUL
6/1/70-6/30/71, RENEWAL, $23,300. OE

27B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF MINNESOTA, MINNEAPOLIS
6/1/70-6/30/71, RENEWAL, $90,000.

CONSTRUCTION

27C005 COMMUNITY FACILITIES CONSTRUCTION THE RANGE CENTER, CHISHOLM
7/1/70-6/30/71, $14,000. SRS-DMR

OTHER

27D005 CHILD DEVELOPMENT CENTER, FERGUS FALLS STATE DEPARTMENT OF HEALTH, MINNEAPOLIS
7/1/70-6/30/71, CONTINUATION, $33,900. SRS-DMR

27D010 CHILD STUDY CENTER, OWATONNA STATE PLEASANTS COUNTY, OWATONNA
7/1/70-6/30/71, CONTINUATION, $60,618. SRS-DMR

27D015 CLINICAL-LABORATORY STUDY MENTALLY RETARDED CHILDREN SAINT PAUL RAMSEY HOSPITAL, SAINT PAUL
1/1/70-12/31/70, CONTINUATION, $24,073. CHS-P

27D020 COORDINATION AND DEVELOPMENT OF DAY ACTIVITY CENTERS AND TRAINING PROGRAM FOR HENNEPIN COUNTY MINNESOTA ASSOCIATION FOR RETARDED CHILDREN, MINNEAPOLIS
5/1/70-4/30/71, CONTINUATION, $33,900. CHS-P

27D025 GROUP DAY CARE FOR RETARDED IN RURAL COMMUNITY MC LEOD COUNTY DAY ACTIVITY CENTER, GLENDON
6/1/70-5/31/71, CONTINUATION, $12,304. SRS-DMR

27D030 MAXIMIZING ROTATION AND GAINS IN MENTAL RETARDATION HABIT TRANING, BRAINERD STATE HOSPITAL, BRAINERD
6/1/70-5/31/71, CONTINUATION, $90,618. SRS-DMR

27D035 MR INITIAL STAFFING, DULUTH MENTAL HYGIENE CLINIC, INC., DULUTH
7/1/70-6/30/71, CONTINUATION, $14,874. SRS-DMR
MISSOURI

TRAINING

29B005 BEHAVIOR MODIFICATION FOR TRAINING
PSYCHIATRIC AIDS HIGGINSVILLE STATE SCHOOL
AND HOSPITAL, HIGGINSVILLE
7/1/70-5/31/71, CONTINUATION, $20,760. SRS-DMR

29B005 CHILD DEVELOPMENT CENTER, ST. LOUIS UNIVERSITY
STATE DEPARTMENT OF PUBLIC HEALTH AND
WELFARE, JEFFERSON CITY
7/1/69-6/30/70, CONTINUATION, $180,020. HSMHA-MCHS

29B010 CHILD DEVELOPMENT CLINIC UNIVERSITY OF MISSOURI, KANSAS CITY
7/1/69-6/30/70, CONTINUATION, $104,907. HSMHA-MCHS

29B015 MULTIPLE HANDICAP CLINIC UNIVERSITY OF MISSOURI, COLUMBIA
7/1/69-6/30/70, CONTINUATION, $156,399. HSMHA-MCHS

29B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN CENTRAL MISSOURI STATE COLLEGE, WARRENSBURG
6/1/70-5/31/71, RENEWAL, $19,380. OE

29B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN NORTHEAST MISSOURI STATE COLLEGE, KIRKSVILLE
6/1/70-5/31/71, RENEWAL, $14,600. OE

29B035 TRAINING VARIOUS LEVELS OF SUPERVISORY
PERSONNEL AND AIDES MR ST. LOUIS STATE SCHOOL-HOSPITAL, ST. LOUIS
7/1/70-6/30/71, CONTINUATION, $23,674. SRS-DMR

29B040 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN ST. LOUIS UNIVERSITY, ST. LOUIS
7/1/70-5/31/71, RENEWAL, $17,700. OE

29B045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, JEFFERSON CITY
6/1/70-5/31/71, RENEWAL, $68,336. OE

29B046 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN FONTBONNE COLLEGE, ST. LOUIS, MISSOURI
6/1/70-5/31/71, INITIAL, $8,700. OE

29B050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF MISSOURI, COLUMBIA
6/1/70-5/31/71, RENEWAL, $64,600. OE

29B053 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF MISSOURI, ST. LOUIS
6/1/70-5/31/71, RENEWAL, $14,600. OE

29B056 STAFF TRAINING FOR SERVICES TO THE
DISADVANTAGED MENTALLY RETARDED VIOLATOR
UNIVERSITY OF MISSOURI, ST. LOUIS
7/1/70-6/30/71, INITIAL, $54,583. SRS-DMR

CONSTRUCTION

29C005 COMMUNITY FACILITIES CONSTRUCTION NORTHEAST MISSOURI SHELTERED WORKSHOP, HANNIBAL
6/22/70, INITIAL, $62,953. SRS-DMR

29C010 COMMUNITY FACILITIES CONSTRUCTION RUTH JENSEN VILLAGE FACILITIES, MISSOURI
6/25/70, INITIAL, $91,189. SRS-DMR

OTHER

29D010 DIAGNOSTIC LABORATORY FOR MENTAL
RETARDATION CURATORS UNIVERSITY OF MISSOURI, COLUMBIA
9/1/70-6/30/71, CONTINUATION, $9,630. CHS-P

29D015 INTENSIVE PROGRAM FOR SEVERELY AND
PROFOUNDLY RETARDED, ST. LOUIS STATE SCHOOL AND HOSPITAL, ST. LOUIS
6/1/70-5/31/71, CONTINUATION, $68,928. SRS-DMR

29D020 MR INITIAL STAFFING, CHILDREN'S MERCY HOSPITAL, KANSAS CITY
7/1/70-6/30/71, CONTINUATION, $50,761. SRS-DMR
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

30D021 MR INITIAL STAFFING JEWISH FOUNDATION FOR RETARDED CHILDREN OF GREATER ST. LOUIS, ST. LOUIS 6/1/70-5/31/71 INITIAL $27,900. SRS-DMR
30D022 MR INITIAL STAFFING KANSAS CITY REGIONAL DIAGNOSTIC CLINIC, KANSAS CITY 9/1/70-8/31/71 INITIAL $125,340. SRS-DMR
30D023 MR INITIAL STAFFING HARRY S. TRUMANS NEUROLOGICAL CENTER, KANSAS CITY 7/1/70-6/30/71 INITIAL $24,327. SRS-DMR
30D025 MR INITIAL STAFFING, REHABILITATION INSTITUTE, INC., KANSAS CITY 7/1/70-6/30/71 CONTINUATION $59,705. SRS-DMR
30D030 MR INITIAL STAFFING WOODHAVEN LEARNING CENTER, COLUMBIA 7/1/70-6/30/71 INITIAL $29,288. SRS-DMR
30D036 RETARDATE TRAINING IN BASIC SKILLS HIGGINSVILLE STATE SCHOOL AND HOSPITAL, HIGGINSVILLE 6/25/70-5/31/71 INITIAL $84,865. SRS-DMR
30D037 SIXESTON-DELMO MENTAL RETARDATION PROJECT DIVISION OF MENTAL HEALTH, JEFFERSON CITY 6/1/70-5/31/71 INITIAL $49,384. SRS-DMR
30D038 STUDENT WORK EXPERIENCE AND TRAINING CURATORS OF THE UNIVERSITY OF MISSOURI, COLUMBIA 6/1/70-5/31/71 INITIAL $4,492. SRS-DMR
30D039 STUDENT WORK EXPERIENCE AND TRAINING MARSHALL STATE SCHOOL AND HOSPITAL, MARSHALL 6/1/70-5/31/71 INITIAL $26,331. SRS-DMR
30D040 TREATMENT UNIT FOR THE PHYSICALLY HANDICAPPED RETARDED, MARSHALL STATE SCHOOL AND HOSPITAL, MARSHALL 6/1/70-5/31/71 CONTINUATION $95,860. SRS-DMR

MONTANA

TRAINING

30B010 A UNIT TEAM TRAINING PROGRAM MR BOULDER RIVER SCHOOL AND HOSPITAL, BOULDER 7/1/70-6/30/71 CONTINUATION $20,133. SRS-DMR
30B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN EASTERN MONTANA COLLEGE, COLLEGE OF EDUCATION, BILLINGS, MONTANA, 6/1/70-8/31/71, RENEWAL, $26,100. OE
30B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN DEPARTMENT OF PUBLIC INSTRUCTION, HELENA 6/1/70-8/31/71, RENEWAL, $30,000. OE

CONSTRUCTION

30C005 COMMUNITY FACILITIES CONSTRUCTION BUTTE SHIELDED WORKSHOP, BUTTE 6/1/70 INITIAL $15,889. SRS-DMR

OTHER

30D005 INITIAL STAFFING, BUTTE SHELTERED WORKSHOP, BUTTE 6/1/70-6/29/71, CONTINUATION, $15,480. SRS-RAA
30D010 DEVELOPMENT OF A COTTAGE UNIT TEAM PROGRAM, BOULDER RIVER SCHOOL AND HOSPITAL, BOULDER 2/1/70-12/31/71 CONTINUATION $85,090. SRS-DMR
30D015 ESTABLISH CLINIC FOR DIAGNOSIS AND EVALUATION OF RETARDED MONTANA STATE DEPARTMENT OF HEALTH, HELENA FY 1969, RENEWAL, $64,840. SRS-P
30D020 ESTABLISH REGIONAL INFORMATION REFERRAL CENTER IN GRANT FACILITY FOR HANDICAPPED CHILDREN MONTANA STATE DEPARTMENT OF HEALTH, HELENA 7/1/69-6/30/70, CONTINUATION, $55,575. CHS-P
30D021 TO RENEW A CLINIC IN MISSOULA FOR MENTALLY RETARDED MONTANA STATE DEPT. OF HEALTH, HELENA 12/1/69-11/30/70 CONTINUATION $47,387. SRS-DMR
30D030 MR INITIAL STAFFING DEPARTMENT OF INSTITUTIONS, HELENA 6/1/70-5/31/71 INITIAL $5,510. SRS-DMR

NEBRASKA

TRAINING

31B003 MENTAL RETARDATION UNIVERSITY OF NEBRASKA, OMAHA, NEBRASKA 7/1/69-6/30/70, CONTINUATION, $18,078. NICHD
31B004 HOSPITAL STAFF DEVELOPMENT BEATRICE STATE HOME, BEATRICE 1/1/70-12/31/70 INITIAL $23,410. SRS-DMR
31B005 A MENTAL RETARDATION EVALUATION AND COUNSELING CLINIC UNIVERSITY OF NEBRASKA, LINCOLN-OMAHA 7/1/69-6/30/70, CONTINUATION, $161,133. HSMHA-MCHS
31B006 LEADERSHIP TRAINING FOR CITIZENS ADVOCACY SERVICES UNIVERSITY OF NEBRASKA, LINCOLN 8/1/70-4/30/71 INITIAL $10,000. SRS-DMR
31B007 CARE OF THE RETARDED AND HANDICAPPED CHILD, UNIVERSITY OF NEBRASKA, OMAHA 7/1/69-6/30/70, INITIAL, $12,176. HSMHA-MCHS
31B008 NATIONAL CONFERENCE ON MATERNAL AND INFANT CARE PROJECTS, UNIVERSITY OF NEBRASKA, OMAHA 7/1/69-6/30/70, INITIAL, $21,335. HSMHA-MCHS
31B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF NEBRASKA, OMAHA, NEBRASKA, 6/1/70-8/31/71, RENEWAL, $19,300. OE
31B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, LINCOLN 6/1/70-8/31/71, RENEWAL, $26,491. OE
31B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF NEBRASKA, OMAHA, NEBRASKA, 6/1/70-8/31/71, RENEWAL, $21,800. OE

CONSTRUCTION

31C005 COMMUNITY FACILITIES CONSTRUCTION MARTIN LUTHER HOME AND SCHOOL, BEATRICE 6/22/70 INITIAL $171,500. SRS-DMR

OTHER

31D004 A BEHAVIOR MODIFICATION PROGRAM FOR RETARDED CHILDREN BEATRICE STATE HOME, BEATRICE 1/1/70-12/31/70 INITIAL $60,978. SRS-DMR
31D005 TRAINING SERVICES GRANT, GOODWILL INDUSTRIES OF OMAHA, OMAHA 6/25/70-6/24/71, CONTINUATION, $155,822. SRS-RSA
31D010 MR INITIAL STAFFING GREATER OMAHA ASSOC. FOR RETARDED CHILDREN, OMAHA 7/1/69-6/30/70, INITIAL, $15,676. SRS-DMR
31D015 MR INITIAL STAFFING BOARD OF REGENTS OF UNIVERSITY OF NEBRASKA, LINCOLN 7/1/69-6/30/70, INITIAL, $21,335. HSMHA-MCHS
31D020 TO RENEW A CLINIC IN MISSOULA FOR THE MENTALLY RETARDED, MONTANA STATE DEPARTMENT OF HEALTH, HELENA, MONTANA, 12/1/69-11/30/70 CONTINUATION, $47,387. SRS-DMR

NEVADA

TRAINING

32B005 PREPARATION OF PROFESSIONAL PERSONNEL IN THE
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

NEW JERSEY

TRAINING

34B010 CONTINUE IMPROVEMENT OF TRAINING FOR COTTAGE LIFE PERSONNEL MR STATE COLONY AT WOODBINE, WOODBINE
7/1/70-6/30/71 CONTINUATION $13,587. SRS-DMR

34B011 CONFERENCE ON POVERTY AND MENTAL RETARDATION NEW JERSEY ASSOCIATION FOR RETARDED CHILDREN, NEW BRUNSWICK
5/17/70-9/30/70 INITIAL $4,000. SRS-DMR

34B015 DEVELOP TRAINING FOR ATTENDANT PERSONNEL MR NORTH JERSEY TRAINING SCHOOL, TOTOWA
7/1/70-6/30/71 CONTINUATION $18,302. SRS-DMR

34B020 FIELD INSTRUCTION OF SOCIAL WORK STUDENTS RUTGERS, THE STATE UNIVERSITY, NEW BRUNSWICK
9/1/69-8/31/70, CONTINUATION, $7,197. SRS-DMR

34B023 INSERVICE TRAINING FOR ATTENDANTS AND PROFESSIONAL STAFF MR VINELAND STATE SCHOOL, VINELAND
7/1/70-6/30/71 CONTINUATION $24,165. SRS-DMR

34B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN GLASSBORO STATE COLLEGE, GLASSBORO
6/1/70-8/31/71, RENEWAL, $44,280. OE

34B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN JERSEY CITY STATE COLLEGE, JERSEY CITY
6/1/70-8/31/71, INITIAL, $8,700. OE

34B040 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN NEWARK STATE COLLEGE, UNION
6/1/70-8/31/71, RENEWAL, $17,400. OE

34B045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN PATTERNSON STATE COLLEGE, WAYNE
6/1/70-8/31/71, INITIAL, $17,700. OE

34B050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY, NEW BRUNSWICK
6/1/70-8/31/71, INITIAL, $24,300. OE

34B055 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, TRENTON
6/1/70-8/31/71, RENEWAL, $11,500. OE

34B060 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN TRENTON STATE COLLEGE, TRENTON
6/1/70-8/31/71, RENEWAL, $24,300. OE

34B065 TEAM ORIENTED TRAINING MR. E.R. JOHNSTONE TRAINING AND RESEARCH CENTER, BORDENTOWN
7/1/70-6/30/71 CONTINUATION, $22,703. SRS-DMR

34B070 TRAINED COTTAGE LIFE EMPLOYEES WITH ADEQUATE KNOWLEDGE AND SKILLS MR STATE COLONY AT NEW LEBANON, NEW LEBANON
7/1/70-6/30/71 CONTINUATION, $15,331. SRS-DMR

34B075 TRAINING PROGRAM FOR ATTENDANT PERSONNEL MR WOODBRIDGE STATE SCHOOL, WOODBRIDGE
7/1/70-6/30/70, RENEWAL, $24,721. SRS-DMR

CONSTRUCTION

34C005 COMMUNITY FACILITIES CONSTRUCTION MORRIS COUNTY DAY CARE CENTER, GRAYSTONE PARK
6/30/70 INITIAL $250,000. SRS-DMR

34C010 COMMUNITY FACILITIES CONSTRUCTION ATLANTIC COUNTY DAY CARE CENTER, ATLANTIC CITY
6/30/70 INITIAL $172,148. SRS-DMR
### CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

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<tr>
<td>New Mexico</td>
<td>Training</td>
<td>$15,000</td>
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</table>

**New Mexico Training**

- INSERVICE TRAINING PROGRAM FOR ATTENDANT PERSONNEL, MR LOS LUNAS HOSPITAL AND TRAINING SCHOOL, LOS LUNAS
- PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN EASTERN NEW MEXICO UNIVERSITY, PORTALES
- PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF PUBLIC INSTRUCTION, SANTA FE
- PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF NEW MEXICO, ALBUQUERQUE
- PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN NEW MEXICO STATE UNIVERSITY, LAS CRUCES, NEW MEXICO

**New Mexico Construction**

- COMMUNITY FACILITIES CONSTRUCTION CASA ANGELICA, ALBUQUERQUE
- COMMUNITY FACILITIES CONSTRUCTION CASA LINDA PRIVATE SCHOOL, ALBUQUERQUE
- COMMUNITY FACILITIES CONSTRUCTION ALBUQUERQUE BOARD OF EDUCATION, ALBUQUERQUE
- COMMUNITY FACILITIES CONSTRUCTION ZIA SCHOOL, INC., ALAMOGordo
- COMMUNITY FACILITIES CONSTRUCTION FORT STANTON HOSPITAL, PONT STANTON

**Other**

- CHILD DEVELOPMENT CENTER, SANTÉ FE STATE DEPARTMENT OF PUBLIC HEALTH, SANTÉ FE
- CHILD STUDY CENTER, ALBUQUERQUE STATE DEPARTMENT OF PUBLIC HEALTH, SANTÉ FE
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

NEW YORK

TRAINING

36B005 A COMMUNITY CENTER DEMONSTRATION AND TRAINING PROGRAM FOR MENTALLY RETARDED CHILDREN AND YOUTH IN THE BRONX RIVER NEIGHBORHOOD CENTER HUNTER COLLEGE, SOCIAL WORK, NEW YORK 7/1/69-6/30/70, CONTINUATION, $35,613. SRS-CSA

36B106 A PLAN TO AID DEVELOPMENT IN DEPENDENT CHILDREN, WEST SENECATE, STATE SCHOOL, WEST SENECATE 6/1/69-5/31/70, RENEWAL, $99,592. SRS-DMR

36B155 CENTER FOR SHORT-TERM TRAINING IN MENTAL RETARDATION, TEACHERS COLLEGE, COLUMBIA UNIVERSITY, NEW YORK 9/1/69-8/31/70, CONTINUATION, $58,949. SRS-RSA

36B205 DIAGNOSTIC AND COUNSELING STUDY CENTER FOR RETARDED CHILDREN, BUFFALO STATE DEPARTMENT OF HEALTH, ALBANY 7/1/69-6/30/70, CONTINUATION, $142,600. HSMHA-MCHS

36B216 EPIDEMIOLOGY OF MENTAL RETARDATION, COLUMBIA UNIVERSITY, NEW YORK, N.Y., 7/10-6/71, INITIAL, $65,892. NICHD

36B258 FACILITY FOR TREATMENT OF METABOLIC DISEASES NEW YORK UNIVERSITY MEDICAL CENTER, NEW YORK 4/1/70-3/31/71, CONTINUATION, $156,600. HSMHA-MCHS

36B308 FIELD INSTRUCTION OF REHABILITATION COUNSELING STUDENTS STATE UNIVERSITY OF NEW YORK, BUFFALO 9/1/69-8/31/70, CONTINUATION, $79,076. HSMHA-MCHS

36B558 FIELD INSTRUCTION OF SOCIAL WORK STUDENTS NEW YORK UNIVERSITY, NEW YORK 9/1/69-8/31/70, CONTINUATION, $35,439. SRS-RSA

36B595 FIELD INSTRUCTION OF SOCIAL WORK STUDENTS SYRACUSE UNIVERSITY, SYRACUSE 6/1/70-3/31/71, CONTINUATION, $36,279. SRS-RSA

36B625 FIFTH NATIONAL CONFERENCE FOR NURSES IN MENTAL RETARDATION, NEW YORK MEDICAL COLLEGE, NEW YORK 7/1/69-6/30/70, INITIAL, $7,000. HSMHA-MCHS

36B655 HUMAN GENETICS PROGRAM STATE UNIVERSITY OF NEW YORK, BUFFALO 7/1/69-6/30/70, CONTINUATION, $195,623. HSMHA-MCHS

36B705 INSERVICE EDUCATION FOR DIRECT PATIENT CARE RESPONSIBILITIES CRAIG COLONY SCHOOL AND HOSPITAL, SONYEA 7/1/69-6/30/70, RENEWAL, $23,299. SRS-DMR


36B808 INTERDISCIPLINARY TRAINING IN MENTAL RETARDATION NEW YORK MEDICAL COLLEGE, NEW YORK 7/1/69-5/31/70, CONTINUATION, $726,912. HSMHA-MCHS

36B855 MENTAL RETARDATION DENTAL TRAINING PROJECT LONG ISLAND JEWISH HOSPITAL, NEW HYDE PARK, N.Y. 9/1/69-8/31/70, CONTINUATION, $11,629. CHS-P

36B900 MULTIPLE TEST PROCEDURE FOR INBORN ERRORS OF METABOLISM STATE UNIVERSITY OF NEW YORK, BUFFALO 7/1/69-6/30/70, CONTINUATION, $156,286. HSMHA-MCHS

36B905 PEDIATRIC AUDIOLGY TRAINING NEW YORK UNIVERSITY MEDICAL CENTER, NEW YORK 4/1/70-3/31/71, CONTINUATION, $38,879. HSMHA-MCHS

36B100 PHYSICAL THERAPY PARTICIPATION IN A MENTAL RETARDATION PROGRAMITHACA COLLEGE, ITHACA 7/1/69-8/30/71, CONTINUATION, $11,264. SRS-DMR

36B106 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN FORDHAM UNIVERSITY, NEW YORK 6/1/70-8/31/71, INITIAL, $26,100. OE

36B107 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN MARYMOUNT MANHATTAN COLLEGE, NEW YORK, NEW YORK, 6/1/70-8/31/71, RENEWAL, $17,700. OE

36B110 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN HEMSTED, LONG ISLAND 6/1/70-8/31/71, REVIEWS, $31,300. OE

36B115 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SONYEA, VILLAGE, NY. STATE DEPT. OF MENTAL HYGIENE, 6/1/70-8/31/71, RENEWAL, $17,700. OE

36B120 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN NEW YORK UNIVERSITY, NEW YORK 6/1/70-8/31/71, RENEWAL, $45,600. OE

36B125 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE UNIVERSITY OF NEW YORK, NEW YORK, 6/1/70-8/31/71, RENEWAL, $45,600. OE

36B130 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN MARYMOUNT MANHATTAN COLLEGE, NEW YORK, 6/1/70-8/31/71, REVIEWS, $17,700. OE

36B135 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SYRACUSE UNIVERSITY, SYRACUSE 6/1/70-8/31/71, RENEWAL, $58,100. OE

36B140 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SYRACUSE UNIVERSITY, SYRACUSE 6/1/70-8/31/71, RENEWAL, $58,100. OE

36B145 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SYRACUSE UNIVERSITY, SYRACUSE 6/1/70-8/31/71, RENEWAL, $58,100. OE

36B155 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN FORDHAM UNIVERSITY, HEMPSTEAD, LONG ISLAND 6/1/70-8/31/71, RENEWAL, $89,100. OE

36B156 PRE-SCHOOL RETARDATE TRAINING FOR COMPREHENSIVE PROGRAMMING IN DISADVANTAGE COMMUNITIES NEW YORK MEDICAL CENTER, FLOWER AND FIFTH AVENUE HOSPITAL, MENTAL RETARDATION CENTER, NEW YORK 5/15/70-10/31/70, INITIAL, $6,000. SRS-DMR

36B157 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, D'YOUVILLE COLLEGE, BUFFALO, NEW YORK, 6/1/70-8/31/71, INITIAL, $8,400. OE

36B158 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, MOUNT ST. MARY COLLEGE COLLEGE, NEWBURGH, NEW YORK, 6/1/70-8/31/71, INITIAL, $8,400. OE

36B160 PROMOTING COMMUNITY LIVING WITH RECREATION ACTIVITIES, ROME STATE SCHOOL, ROME 9/1/68-8/31/69, RENEWAL, $62,518. SRS-DMR

36B165 PSYCHIATRY-MENTAL RETARDATION LETCHWORTH VILLAGE, N.Y. STATE DEPT. OF MENTAL HYGIENE, THIELLS, 7/1/70-6/30/71, CONTINUATION, $38,499. NIMH
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970


OTHER

### TRAINING

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<th>Description</th>
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<td>37B005</td>
<td>Automated detection in neurometabolic diseases</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
<td>7/1/69-6/30/70</td>
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<td>B1-Regional short term training grant for development in mental retardation</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
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<td>Developmental evaluation clinic university of mental retardation</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
<td>7/1/69-6/30/70</td>
<td>Continuation, 7/1/70-6/30/71</td>
<td>$32,000</td>
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<tr>
<td>37B020</td>
<td>Developmental evaluation clinic, Bowman Gray State University</td>
<td>North Carolina</td>
<td>Bowman Gray State University, Winston-Salem</td>
<td>7/1/69-6/30/70</td>
<td>Continuation, 7/1/70-6/30/71</td>
<td>$129,434</td>
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<td>37B025</td>
<td>Inservice training for cottage life personnel</td>
<td>North Carolina</td>
<td>Western Carolina Center, Morganton</td>
<td>7/1/69-6/30/70</td>
<td>Continuation, 7/1/70-6/30/71</td>
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<td>37B030</td>
<td>Inservice training for cottage life personnel</td>
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<td>Western Carolina Center, Morganton</td>
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<td>37B031</td>
<td>Mental retardation, Duke university, Durham</td>
<td>North Carolina</td>
<td>Duke University, Durham</td>
<td>7/1/69-6/30/70</td>
<td>Continuation, 7/1/70-6/30/71</td>
<td>$32,148</td>
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<tr>
<td>37B032</td>
<td>Nursing innovation in child care, university of North Carolina</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
<td>7/1/69-6/30/70</td>
<td>Initial, 7/1/69-6/30/70</td>
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<td>37B033</td>
<td>Interdisciplinary training special project: university affiliated center for mental retardation</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
<td>6/1/70-8/31/71</td>
<td>Renewal, 11/1/70-8/31/71</td>
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<td>37B035</td>
<td>Preparation of professional personnel in the education of handicapped children</td>
<td>North Carolina</td>
<td>Appalachian State University, Boone, North Carolina</td>
<td>6/1/70-8/31/71</td>
<td>Renewal, 11/1/70-8/31/71</td>
<td>$14,300</td>
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<tr>
<td>37B036</td>
<td>Preparation of professional personnel in the education of handicapped children</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
<td>6/1/70-8/31/71</td>
<td>Initial, 6/1/70-8/31/71</td>
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<td>37B040</td>
<td>Preparation of professional personnel in the education of handicapped children</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
<td>6/1/70-8/31/71</td>
<td>Initial, 6/1/70-8/31/71</td>
<td>$33,900</td>
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<td>37B045</td>
<td>Preparation of professional personnel in the education of handicapped children</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
<td>6/1/70-8/31/71</td>
<td>Renewal, 11/1/70-8/31/71</td>
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### CONSTRUCTION

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<th>Institution</th>
<th>Initial Date</th>
<th>Renewal Date</th>
<th>Amount</th>
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<td>37C005</td>
<td>Community facilities construction sheltered workshop and vocational training center</td>
<td>North Carolina</td>
<td>Carolina College, Cullowhee University</td>
<td>7/1/69-6/30/70</td>
<td>Initial, $82,719</td>
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<td>37C010</td>
<td>Community facilities construction mecklenburg center for human development</td>
<td>New York</td>
<td>New York, New York</td>
<td>1/1/70-12/31/70</td>
<td>Initial, $115,567</td>
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### OTHER

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<th>Renewal Date</th>
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<tr>
<td>37D004</td>
<td>Expanded social casework to residents</td>
<td>North Carolina</td>
<td>Caswell Center, Kinston</td>
<td>6/1/70-5/31/71</td>
<td>Initial, $32,273</td>
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<td>37D005</td>
<td>Comprehensive day care program for mentally retarded day care center</td>
<td>North Carolina</td>
<td>Retirement Home, Fayetteville</td>
<td>7/1/69-6/30/70</td>
<td>Continuation, $14,148</td>
<td>SRS-DMR</td>
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<td>37D010</td>
<td>Transition buffer unit for mentally retarded</td>
<td>North Carolina</td>
<td>Carolina College, Cullowhee University</td>
<td>7/1/69-6/30/70</td>
<td>Continuation, $43,864</td>
<td>CHS-P</td>
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<td>37D034</td>
<td>Initial staffing development evaluation clinic and activity center</td>
<td>North Carolina</td>
<td>Carolina College, Cullowhee University</td>
<td>7/1/69-6/30/70</td>
<td>Initial, $14,148</td>
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<tr>
<td>37D035</td>
<td>Initial staffing, development evaluation clinic and day care activity center</td>
<td>North Carolina</td>
<td>Carolina College, Cullowhee University</td>
<td>7/1/69-6/30/70</td>
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<td>37D036</td>
<td>Initial staffing edgecombe retarded center</td>
<td>North Carolina</td>
<td>Carolina College, Cullowhee University</td>
<td>7/1/69-6/30/70</td>
<td>Continuation, $2,727</td>
<td>SRS-DMR</td>
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<td>37D037</td>
<td>Initial staffing family services inc., Winston-Salem</td>
<td>North Carolina</td>
<td>Winston-Salem, Winston-Salem</td>
<td>7/1/69-6/30/70</td>
<td>Initial, $32,148</td>
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<td>37D040</td>
<td>Initial staffing farmville child development center, Farmville</td>
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<td>Farmville Child Development Center, Farmville</td>
<td>7/1/69-6/30/70</td>
<td>Initial, $14,148</td>
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<td>37D045</td>
<td>Initial staffing, greensboro sheltered workshop inc., Greensboro</td>
<td>North Carolina</td>
<td>Greensboro, Greensboro</td>
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<td>37D046</td>
<td>Initial staffing helping hand day care center for retarded, Hendersonville</td>
<td>North Carolina</td>
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<td>37D050</td>
<td>Initial staffing, high point kindergarten for the handicapped, high point</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
<td>8/1/70-7/31/71</td>
<td>Continuation, $14,148</td>
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<td>Initial staffing high point sheltered workshop, high point</td>
<td>North Carolina</td>
<td>University of North Carolina, Chapel Hill</td>
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<tr>
<td>37D052</td>
<td>Initial staffing hertford county day care center for handicapped children, Statesville</td>
<td>North Carolina</td>
<td>Hertford County Day Care Center, Statesville</td>
<td>9/1/69-6/30/70</td>
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<td>37D055</td>
<td>Initial staffing johnston county day care center, greensboro</td>
<td>North Carolina</td>
<td>Johnston County Day Care Center, Greensboro</td>
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<tr>
<td>37D056</td>
<td>Initial staffing mars hill handy-school, raleigh</td>
<td>North Carolina</td>
<td>Mars Hill Handy-School, Raleigh</td>
<td>9/1/69-6/30/70</td>
<td>Initial, $14,287</td>
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CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

OHIO

TRAINING

39B005 CLINICAL PSYCHOLOGY TRAINING IN A

39B010 MENTAL RETARDATION TRAINING OHIO STATE UNIVERSITY, COLUMBUS 7/1/69-6/30/70, CONTINUATION, $78,501. HSMA-MCHS

39B011 INTERDISCIPLINARY TRAINING SPECIAL PROJECT UNIVERSITY AFFILIATED FACILITY OHIO STATE UNIVERSITY, COLUMBUS, OHIO 6/1/70-5/31/71, RENEWAL, $2,300. OE

39B012 INTERDISCIPLINARY TRAINING SPECIAL PROJECT UNIVERSITY AFFILIATED FACILITY, UNIVERSITY OF CINCINNATI, CINCINNATI, OHIO 6/1/70-5/31/71, RENEWAL, $2,250. OE

39B015 MENTAL RETARDATION TRAINING PROGRAM CORE GROUP THE OHIO STATE UNIVERSITY, COLUMBUS 1/1/70-7/31/71 CONTINUATION, $582,207. SRS-DMR

39B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN BOWLING GREEN STATE UNIVERSITY, BOWLING GREEN 6/1/70-8/31/71, RENEWAL, $4,000. OE

39B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE INSTITUTIONALIZED SEVERELY AND PROFOUNDLY MENTALLY RETARDED PERSONS STATE UNIVERSITY, CLEVELAND 6/1/70-8/31/71, RENEWAL, $5,200. OE

39B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE INSTITUTIONALIZED SEVERELY AND PROFOUNDLY MENTALLY RETARDED PERSONS OHIO STATE UNIVERSITY, COLUMBUS 6/1/70-8/31/71, RENEWAL, $5,200. OE

39B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE INSTITUTIONALIZED SEVERELY AND PROFOUNDLY MENTALLY RETARDED PERSONS UNIVERSITY OF CINCINNATI, CINCINNATI 6/1/70-8/31/71, RENEWAL, $5,200. OE

39B040 PREPARATION OF PROFESSIONAL PERSONNEL IN THE INSTITUTIONALIZED SEVERELY AND PROFOUNDLY MENTALLY RETARDED PERSONS OHIO STATE UNIVERSITY, CLEVELAND 6/1/70-8/31/71, RENEWAL, $5,200. OE

39B045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF CINCINNATI, CINCINNATI 6/1/70-8/31/71, RENEWAL, $5,200. OE

39B055 TRAINING IN MENTAL RETARDATION FOR VINCENT LUSTIG OHIO STATE UNIVERSITY, COLUMBUS 1/1/69, INITIAL, $5,200. OE

39B060 TRAINING IN THE COMPREHENSIVE CARE OF HANDICAPPED CHILDREN CASE WESTERN RESERVE UNIVERSITY, CLEVELAND 7/1/69-6/30/70, CONTINUATION, $9,165. HSMA-MCHS

39B065 DEVELOPMENT OF SELF HELP AND SOCIAL SKILLS IN INSTITUTIONALIZED SEVERELY AND PROFOUNDLY MENTALLY RETARDED PERSONS COLUMBUS STATE INSTITUTE, COLUMBUS 7/1/70-6/30/71 CONTINUATION, $52,700. SRS-DMR

39B070 TRAINING PROGRAM FOR DOCTORAL STUDENTS IN PSYCHOLOGY OHIO STATE UNIVERSITY, COLUMBUS 10/1-6/30/69, RENEWAL, $140,118. SRS-CB

39B075 TRAINING PROGRAM IN MENTAL RETARDATION CASE WESTERN RESERVE UNIVERSITY, CLEVELAND 7/1/69-6/30/70, CONTINUATION, $4,001. HSMA-MCHS

39B080 TRAINING SERVICES GRANT GOODWILL INDUSTRIES OF CENTRAL OHIO, OHIO 6/25/70-6/24/71, CONTINUATION, $145,750. SRS-DMR

39B085 TREATMENT OF METABOLIC DISORDERS REQUIRING LONG, A CLINICAL TEAM APPROACH CHILDREN'S HOSPITAL, CINCINNATI 7/1/69-6/30/70, CONTINUATION, $53,000. HSMA-MCHS

39B090 UNIVERSITY AFFILIATED PROGRAM FOR THE MENTALLY RETARDED UNIVERSITY OF CINCINNATI, CINCINNATI 7/1/69-6/30/70, CONTINUATION, $583,500. HSMA-MCHS

CONSTRUCTION

39C005 COMMUNITY FACILITIES CONSTRUCTION WOOD COUNTY RETARDED CHILDREN'S PROGRAM BOWLING GREEN 6/25/70 INITIAL $243,300. SRS-DMR

39C010 COMMUNITY FACILITIES CONSTRUCTION DEVELOPMENTAL CENTER CLEVELAND 6/22/70 INITIAL $249,939. SRS-DMR
### OKLAHOMA

#### TRAINING

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Description</th>
<th>Initial Period</th>
<th>Amount</th>
<th>Agency</th>
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<tbody>
<tr>
<td>40B005</td>
<td>Developing Trainers of the Severely Retarded</td>
<td>7/1/70-6/30/71</td>
<td>$9,007</td>
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<tr>
<td>40B100</td>
<td>Field Instruction of Physical Therapy</td>
<td>7/1/70-6/30/71</td>
<td>$24,000</td>
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<tr>
<td>40B115</td>
<td>Formal Training for Patient Care Personnel</td>
<td>7/1/70-6/30/71</td>
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<tr>
<td>40B116</td>
<td>Nursing Home Personnel Training</td>
<td>7/1/70-6/30/71</td>
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<td>40B200</td>
<td>Training the Attendee as a Transfered</td>
<td>7/1/70-6/30/71</td>
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<tr>
<td>40B300</td>
<td>Preparation of Professional Personnel in the Education of Handicapped Children</td>
<td>7/1/70-6/30/71</td>
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<tr>
<td>40B400</td>
<td>Training for Professional and Non-Professional Personnel</td>
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#### CONSTRUCTION

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<tr>
<td>40C005</td>
<td>Community Facilities Construction Gateway Foundation, Inc.</td>
<td>6/30/70</td>
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<td>40C010</td>
<td>Community Facilities Construction Sapulpa School for the Handicapped</td>
<td>6/30/70</td>
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## TRAINING

### OREGON

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<tr>
<td>40D005</td>
<td>CHILD STUDY CLINIC, TULSA CHILDREN'S MEDICAL CENTER - DEPARTMENT OF HEALTH, OKLAHOMA CITY</td>
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<tr>
<td>40D010</td>
<td>FACILITY IMPROVEMENT GRANT - CHICKASHA OPPORTUNITY WORKSHOP AND TRAINING CENTER, CHICKASHA</td>
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<tr>
<td>40D015</td>
<td>MR INITIAL STAFFING, CASADY SCHOOL - OLMERTO</td>
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<tr>
<td>40D020</td>
<td>MR INITIAL STAFFING, CHILDREN'S MEDICAL CENTER, TULSA</td>
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<tr>
<td>40D021</td>
<td>MR INITIAL STAFFING, RAY CO. COUNCIL FOR RETARDED CHILDREN, PONCA CITY</td>
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<tr>
<td>40D025</td>
<td>HABITATING PROFOUND RETARDS FOR COMMUNITY LIVING END STATE SCHOOL, ENID</td>
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<tr>
<td>40D030</td>
<td>STUDENT WORK EXPERIENCE AND TRAINING, ENID STATE SCHOOL - OKLAHOMA DEPARTMENT OF PUBLIC WELFARE, OKLAHOMA CITY, OKLAHOMA</td>
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### OTHER

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<tr>
<td>41B005</td>
<td>COMMUNITY FACILITIES CONSTRUCTION GOOD SHEPHERD LUTHERAN HOME, CORNELIUS</td>
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<tr>
<td>41D004</td>
<td>A SERVICE AND DEMONSTRATION PROJECT FOR THE MANAGEMENT OF CHILDREN WITH PHYSICAL HANDICAPS AND MENTAL RETARDATION, UNIVERSITY OF OREGON, EUGENE</td>
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<tr>
<td>41D005</td>
<td>STUDENT WORK EXPERIENCE AND TRAINING, FAIRVIEW HOSPITAL AND TRAINING CENTER, SALEM, OREGON</td>
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<td>41D025</td>
<td>GENETICS STUDY, PORTLAND UNIVERSITY OF OREGON MEDICAL SCHOOL, PORTLAND</td>
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<td>METABOLIC DISORDER SCREENING, PORTLAND STATE BOARD OF HEALTH, PORTLAND</td>
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<tr>
<td>41D045</td>
<td>MR INITIAL STAFFING, CLACKAMAS CHALLENGE CENTER, INC, MILWAUKIE</td>
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<tr>
<td>41D050</td>
<td>MR INITIAL STAFFING, GOODWILL INDUSTRIES OF OREGON, PORTLAND</td>
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<tr>
<td>41D060</td>
<td>MR INITIAL STAFFING, POLK ASSOC. FOR RETARDED CHILDREN, DALLAS</td>
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### PENNSYLVANIA

<table>
<thead>
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<tr>
<td>42B004</td>
<td>PEDIATRIC RESEARCH, CHILDREN'S HOSPITAL OF PHILADELPHIA, PHILADELPHIA, PENNSYLVANIA</td>
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<tr>
<td>42B005</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, BLOOMSBURG STATE COLLEGE, BLOOMSBURG</td>
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<tr>
<td>42B006</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, CALIFORNIA STATE COLLEGE, CALIFORNIA, PENNSYLVANIA</td>
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<td>42B007</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, UNIVERSITY OF PENNSYLVANIA, INDIANA, PENNSYLVANIA</td>
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<tr>
<td>42B010</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, CLARION STATE COLLEGE, CLARION</td>
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<tr>
<td>42B015</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, DUQUESNE UNIVERSITY, PITTSBURGH</td>
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<tr>
<td>42B020</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, EDINBORO STATE COLLEGE, EDINBORO</td>
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<tr>
<td>42B025</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, HAVEN STATE COLLEGE, LOCK HAVEN</td>
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<tr>
<td>42B030</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, MANSFIELD STATE COLLEGE, MANSFIELD</td>
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<tr>
<td>42B040</td>
<td>PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, MILLERSVILLE STATE COLLEGE, MILLERSVILLE</td>
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### CONSTRUCTION

<table>
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<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>41C005</td>
<td>CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970</td>
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### RENEWAL

<table>
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<tr>
<td>6/1/70-8/31/71</td>
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CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

42D045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK 6/1/70-8/31/71, RENEWAL, $82,700. OE

42D050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SLIPPERY ROCK STATE COLLEGE, SLIPPERY ROCK 6/1/70-8/31/71, RENEWAL, $64,100. OE

42D055 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF PUBLIC INSTRUCTION, HARRISBURG 6/1/70-8/31/71, RENEWAL, $54,000. OE

42D060 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN TEMPLE UNIVERSITY, PHILADELPHIA 6/1/70-8/31/71, RENEWAL, $56,200. OE

42D065 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF PITTSBURGH, PITTSBURGH, PENNSYLVANIA 6/1/70-8/31/71, RENEWAL, $37,100. OE

42D070 DEVELOP ATTENDANT LEADERS FOR INSTITUTIONS MR PENNHURST STATE SCHOOL AND HOSPITAL, SPRING CITY 7/1/69-6/30/70, INITIAL, $18,607, SRS-DMR

42D075 DEVELOP INSERVICE TRAINING FOR ATTENDANT PERSONNEL MR EBENSBURG STATE SCHOOL AND HOSPITAL, EBENSBURG 7/1/70-6/30/71, CONTINUATION, $23,275. SRS-DMR

42D080 DEVELOPMENTAL CLINIC, PITTSBURGH, CHILDREN'S HOSPITAL STATE DEPARTMENT OF HEALTH, HARRISBURG 7/1/69-6/30/70, CONTINUATION, $217,304. HSMHA-MCHS

42D085 INSERVICE TRAINING FOR ATTENDANTS AND NURSING PERSONNEL MR LAURELTON STATE SCHOOL AND HOSPITAL, LAURELTON 7/1/70-6/30/71, CONTINUATION, $115,071. SRS-DMR

42D090 INSERVICE TRAINING FOR CHILD CARE WORKERS MR WESTERN STATE SCHOOL AND HOSPITAL, CANNONSBURG 7/1/69-6/30/70, RENEWAL, $5,985. SRS-DMR

42D095 INSERVICE TRAINING FOR ENTIRE STAFF MR THE CRESSON STATE SCHOOL AND HOSPITAL CRESSON 7/1/70-6/30/71, CONTINUATION, $15,158. SRS-DMR

42D100 INTERNSHIPS FOR REHABILITATION COUNSELING AND PSYCHOLOGY STUDENTS THE DEVEREUX FOUNDATION, DEVON 9/1/69-8/31/71, CONTINUATION, $125,650. SRS-DMR

42D105 PERSONNEL TRAINING FOR HANDICAPPED CHILDREN ST. CHRISTOPHER'S HOSPITAL, PHILADELPHIA 7/1/69-6/30/70, CONTINUATION, $349,393. HSMHA-MCHS

42D110 PRACTICE APPROACHES IN REDUCING RISK IN CHILD HEALTH, UNIVERSITY OF PITTSBURGH, PENNSYLVANIA 7/1/69-6/30/70, INITIAL, $9,414. HSMHA-MCHS

42D115 PROVISION OF COMPREHENSIVE CARE TO CHILDREN WITH HANDICAP, PHYSICAL, AND/OR MENTAL DEFICITS, CHILDREN'S HOSPITAL OF PHILADELPHIA STATE DEPARTMENT OF HEALTH, HARRISBURG 7/1/69-6/30/70, CONTINUATION, $218,484. HSMHA-MCHS

42D120 SOCIAL WORK FELLOWSHIP IN MENTAL RETARDATION BRYN MAWR COLLEGE, BRYN MAWR 7/1/69-6/30/70, CONTINUATION, $20,065. HSMHA-MCHS

42D125 TRAINING GRANT IN SUPPORT OF A CASEWORK UNIT IN MENTAL RETARDATION UNIVERSITY OF PITTSBURGH, PITTSBURGH 7/1/70-6/30/71, CONTINUATION, $40,522. SRS-DMR

CONSTRUCTION

42C005 COMMUNITY FACILITIES CONSTRUCTION THE BURNLEY WORKSHOP OF THE POCONOS, EAST SHOHODBURG 6/1/70-8/31/70, INITIAL $150,570. SRS-DMR

42C010 COMMUNITY FACILITIES CONSTRUCTION LARK WORKSHOP FOR THE HANDICAPPED, NEW CASTLE 6/1/70-8/31/70, INITIAL $150,570. SRS-DMR

42D015 COMMUNITY FACILITIES CONSTRUCTION BETHEL PARK CENTER, BETHEL PARK 6/1/70 INITIAL $20,011. SRS-DMR

OTHER

42D010 IMPROVING SELF-CONCEPT IN UNDIFFERENTIATED RETARDS, HAMBURG STATE SCHOOL AND HOSPITAL, HAMBURG 6/1/70-8/31/71 CONTINUATION $82,222. SRS-DMR

42D015 BEHAVIOR MODIFICATION UNIT LAURELTON STATE SCHOOL AND HOSPITAL, LAURELTON 6/1/70-8/31/71 INITIAL $86,822. SRS-DMR

42D020 MR INITIAL STAFFING, ASSOCIATION FOR RETARDED CHILDREN, BALTIMORE 7/1/69-6/30/70, INITIAL, $77,915. SRS-DMR

42D024 MR INITIAL STAFFING, EXCEPTIONAL CHILDREN'S DAY CARE CENTER, ST. MARY'S 7/1/69-6/30/70, INITIAL, $8,365. SRS-DMR

42D036 MR INITIAL STAFFING, RETARDED CHILDRENS DAY CARE CENTER, ST. MARYS 7/1/70-6/30/71, CONTINUATION, $3,141. SRS-DMR

42D040 MR INITIAL STAFFING, HORIZON HOME, INC. PITTSBURGH 9/1/70-8/31/71 INITIAL $64,350. SRS-DMR

42D041 MR INITIAL STAFFING, LAUREL HOUSE ASSOC., UNIONTOWN 7/1/69-6/30/71 INITIAL $5,500. SRS-DMR

42D045 MR INITIAL STAFFING, KENSINGTON DISPENSARY, INC., PHILADELPHIA 7/1/69-6/30/70, INITIAL, $10,170. SRS-DMR

42D046 MR INITIAL STAFFING, KEN-CREST CENTER FOR EXCEPTIONAL PERSONS, MONT CLARE 9/1/70-8/31/71 CONTINUATION, $6,813. SRS-DMR

42D047 MR INITIAL STAFFING, LEHIGH VALLEY ASSOCIATION FOR RETARDED CHILDREN, BETHLEHEM 7/1/70-6/30/71, INITIAL $30,378. SRS-DMR

42D055 MR INITIAL STAFFING, PHILADELPHIA ASN. FOR RETARDED CHILDREN, PHILADELPHIA 7/1/70-6/30/71, CONTINUATION $39,955. SRS-DMR

42D056 MR INITIAL STAFFING, RONALD BRUCE KIPON ASSOC., PHILADELPHIA 7/1/70-8/31/71, INITIAL, $24,329. SRS-DMR

42D060 MR INITIAL STAFFING, ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN, PHILADELPHIA 9/1/70-8/31/71 CONTINUATION $24,090. SRS-DMR

42D061 MR INITIAL STAFFING, ST. CHRISTOPHER'S HOSPITAL FOR CHILDREN, PHILADELPHIA 7/1/70-6/30/71, INITIAL $34,575. SRS-DMR

42D062 MR INITIAL STAFFING, ST PETERS CHILD DEVELOPMENT CENTERS, PITTSBURGH 7/1/70-6/30/71, INITIAL $55,659. SRS-DMR

42D065 MR INITIAL STAFFING, TEMPLE UNIVERSITY HEALTH SCIENCES CENTER, PHILADELPHIA 7/1/70-6/30/71, INITIAL $110,964. SRS-DMR

42D075 MR INITIAL STAFFING, WASHINGTON CO. CHAPTER PA. ASSN. FOR R.C., INC., WASHINGTON 9/1/70-8/31/71 CONTINUATION $4,885. SRS-DMR

42D076 MR INITIAL STAFFING, WEST PHILADELPHIA CORPORATION, PHILADELPHIA 9/1/70-8/31/71 CONTINUATION $84,646. SRS-DMR

42D080 STUDENT WORK EXPERIENCE AND TRAINING, LAURELTON STATE SCHOOL AND HOSPITAL, LAURELTON, PENNSYLVANIA 6/1/70-8/31/70, INITIAL, $11,510. SRS-DMR

42D085 TRAINING SERVICES GRANT, ELWYN INSTITUTE-REHABILITATION CENTER, ELWYN 6/1/70-8/31/70, CONTINUATION, $210,020. SRS-DMR

42D086 STUDENT WORK EXPERIENCE AND TRAINING, PENNHURST STATE SCHOOL AND HOSPITAL, SPRING CITY, PENNSYLVANIA 6/1/70-8/31/70, INITIAL, $52,288. SRS-DMR

42D090 STUDENT WORK EXPERIENCE AND TRAINING, ELWYN INSTITUTE, ELWYN, PENNSYLVANIA 6/1/70-8/31/70, INITIAL, $3,250. SRS-DMR
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

OTHER

44D004 A CHILD DEVELOPMENT RESIDENTIAL PROGRAM, DR. JOSEPH H. LADD SCHOOL, NORTH KINGSTOWN
6/1/70-6/30/71, INITIAL $79,159. SRS-DMR

44D005 CHILD DEVELOPMENT CENTER, RHODE ISLAND HOSPITAL, PROVIDENCE STATE DEPARTMENT OF HEALTH, PROVIDENCE
7/1/69-6/30/70, CONTINUATION, $229,183. HSMHA-MCHS

44D010 DENTAL CARE PROGRAM FOR RETARDED CHILDREN, SAMUELS DENTAL CLINIC FOR CHILDREN, PROVIDENCE STATE DEPARTMENT OF HEALTH, PROVIDENCE
7/1/69-6/30/70, CONTINUATION, $51,500. HSMHA-MCHS

44D015 MR INITIAL STAFFING CRANSTON CHAPTER FOR RETARDED CHILDREN, CRANSTON
7/1/70-6/30/71, INITIAL $233,925. SRS-DMR

44D020 REGIONAL DAY CARE CENTER DEMONSTRATION PROJECT RHODE ISLAND DEPARTMENT OF HEALTH, PROVIDENCE
5/1/70-4/30/71, CONTINUATION, $74,400. CHS-P

44D025 STUDENT WORK EXPERIENCE AND TRAINING, DR. JOSEPH H. LADD SCHOOL, NORTH KINGSTOWN, RHODE ISLAND, CRANSTON
6/1/70-5/31/71, INITIAL, $6,655. SRS-DMR

SOUTH CAROLINA

TRAINING

45B015 INSERVICE TRAINING FOR STAFF ON COTTAGE LIFE MIDLANDS CENTER, COLUMBIA
7/1/70-6/30/71, CONTINUATION, $51,297. SRS-DMR

45B020 INSERVICE TRAINING FOR PATIENT CARE PERSONNEL MR SOUTH CAROLINA RETARDED CHILDREN'S HABILITATION CENTER, LADSON
7/1/70-6/30/71, CONTINUATION, $22,512. SRS-DMR

45B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN COLUMBIA COLLEGE, COLUMBIA
6/1/70-5/31/71, RENEWAL, $11,200. OE

45B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN SOUTH CAROLINA STATE COLLEGE, ORANGEBURG
6/1/70-5/31/71, RENEWAL, $11,200. OE

45B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, COLUMBIA
6/1/70-5/31/71, RENEWAL, $11,200. OE

45B045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN WINTHROP COLLEGE, ROCK HILL
6/1/70-5/31/71, RENEWAL, $11,200. OE

45B055 UNIVERSITY TRAINING IN MENTAL RETARDATION, UNIVERSITY OF SOUTH CAROLINA, COLUMBIA
9/1/69-8/31/70, CONTINUATION, $39,778. CHS-P

45B060 WORKSHOP ON YOUTHFUL OFFENDER IDENTIFIED AS MENTALLY RETARDED SOUTH CAROLINA DEPARTMENT OF MENTAL RETARDATION, COLUMBIA
6/1/70-7/31/71, INITIAL, $10,000. SRS-DMR

OTHER

45D005 A DEVELOPMENTAL ACTIVITIES PROGRAM FOR THE MR AT PENELAND STATE TRAINING SCHOOL AND HOSPITAL, COLUMBIA
3/1/70-2/28/71, CONTINUATION, $94,388. SRS-DMR

45D010 CHILD EVALUATION CLINIC, COLUMBIA STATE BOARD OF HEALTH, COLUMBIA
7/1/69-6/30/70, CONTINUATION, $30,000. HSMHA-MCHS

45D015 DEVELOPMENTAL TEAM FOR SEVERELY PROFOUNDLY RETARDED, SOUTH CAROLINA RETARDED CHILDREN'S HABILITATION, LADSON
7/1/70-6/30/71, CONTINUATION, $51,248. SRS-DMR

45D019 MR INITIAL STAFFING CHARLESTON REHAB WORKSHOP FOR HANDICAPPED, CHARLESTON
7/1/70-6/30/71, INITIAL $12,525. SRS-DMR

RHODE ISLAND

TRAINING

44B005 EMPLOY STAFF TO TRAIN ATTENDANTS IN COOPERATION WITH UNIV. OF R. I. DR. JOSEPH H. LADD SCHOOL, NORTH KINGSTOWN
7/1/70-6/30/71, CONTINUATION, $233,471. SRS-DMR

44B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN RHODE ISLAND COLLEGE, PROVIDENCE
6/1/70-5/31/71, INITIAL, $4,800. SRS-DMR

44B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN RHODE ISLAND DEPARTMENT OF EDUCATION, PROVIDENCE
6/1/70-5/31/71, RENEWAL, $15,200. OE

CONSTRUCTION

44C005 COMMUNITY FACILITIES CONSTRUCTION, J.A. TRUDEAU MEMORIAL CENTER, WARWICK 7/1/69-
6/30/70, INITIAL $290,183. HSMHA-MCHS

44C010 COMMUNITY FACILITIES CONSTRUCTION CRANSTON CENTER FOR MENTALLY RETARDED, CRANSTON
6/30/70, INITIAL $226,929. SRS-DMR

PUERTO RICO

TRAINING

43B005 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN DEPARTMENT OF EDUCATION, HATO REY, SAN JUAN
6/1/70-5/31/71, INITIAL, $31,200. SRS-DMR

43B050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF PUERTO RICO, RIO PIEDRAS, SAN JUAN
6/1/70-5/31/71, INITIAL, $229,800. OE

43B055 THE ROLE OF THE NURSE IN THE CARE OF THE MENTALLY RETARDED CHILD, UNIVERSITY OF PUERTO RICO, SAN JUAN
7/1/69-6/30/70, INITIAL, $3,398. HSMHA-MCHS

OTHER

43D005 FIELD INSTRUCTION OF SOCIAL WORK STUDENTS UNIVERSITY OF PUERTO RICO, RIO PIEDRAS, SAN JUAN
6/1/70-5/31/71, INITIAL, $31,000. SRS-DMR

43D040 MR INITIAL STAFFING ASSOCIACION PRO-NINOS MENTALMENTE ANORMALES, TRUJILLO ALTO
7/1/70-6/30/71, INITIAL, $81,763. SRS-DMR

43D044 MR INITIAL STAFFING ASSOCIATION FOR RETARDED CHILDREN, HATO REY
7/1/70-6/30/71, CONTINUATION, $62,916. SRS-DMR

43D045 MR INITIAL STAFFING INSTITUTO PSICOPEDAGOGICO DE PUERTO RICO, SAN JUAN
8/1/70-7/31/71, CONTINUATION, $103,923. SRS-DMR

43D046 MR INITIAL STAFFING ESCUELA ESPECIAL NILMAR INC., SAN JUAN
7/1/70-6/30/71, INITIAL, $3,525. SRS-DMR

43D050 STUDENT WORK EXPERIENCE AND TRAINING, INSTITUTO PSICOPEDAGOGICO DE PUERTO RICO, SAN JUAN, PUERTO RICO
6/1/70-5/31/71, INITIAL, $4,230. SRS-DMR

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### South Dakota

**Training**

- **46B005** Preparation of Professional Personnel in the Education of Handicapped Children, Augustana College, Sioux Falls
  - 7/1/70-8/31/71, Renewal, $17,700, OE
- **46B010** Preparation of Professional Personnel in the Education of Handicapped Children, Black Hills State College, Spearfish, South Dakota
  - 7/1/70-8/31/71, Renewal, $17,700, OE
- **46B020** Preparation of Professional Personnel in the Education of Handicapped Children State Department of Public Instruction, Pierre
  - 7/1/70-8/31/71, Renewal, $16,100, OE
- **46B025** Preparation of Professional Personnel in the Education of Handicapped Children, Vermillion
  - 7/1/70-8/31/71, Renewal, $25,800, OE

### Other

- **46D005** Facility Improvement Grant, Black Hills Workshop School, Rapid City
  - 6/25/70-6/24/71, Continuation, $22,340, SRS-RSA
- **46D010** MR Initial Staffing, Sioux Vocational School, For the Handicapped, Sioux Falls
  - 7/1/70-6/30/71, Continuation, $12,597, SRS-DMR

### Tennessee

**Training**

- **47B005** Child Development Center, University of Tennessee, Memphis
  - 7/1/69-6/30/70, Continuation, $83,484, HSMHA-MCHS
- **47B010** Diagnostic and Training Laboratory in Mental Retardation, Meharry Medical College, Nashville
  - 1/1/70-12/31/70, Continuation, $114,718, HSMHA-MCHS
- **47B015** Genetics Laboratory, University of Tennessee, Memphis
  - 7/1/68-6/30/69, Renewal, $38,982, SRS-CB
- **47B020** Interdisciplinary Training-Special Project, University Affiliated Facility, University of Tennessee, Memphis, Tennessee
  - 6/1/70-8/31/71, Renewal, $30,000, OE

**Construction, Training and Other Grants for Each State, 1970**

- **47C005** Community Facilities Construction, Dawn of Hope Developmental Center, Inc., Johnson City
  - 6/30/70 Initial, $111,283, SRS-DMR
- **47C010** Community Facilities Construction, Sunshine Center for the Handicapped, Knoxville
  - 6/30/70 Initial, $12,800, SRS-DMR
- **47C015** Community Facilities Construction, Special Education Demonstration Center for Mentally Retarded, Green Valley School
  - 6/30/70 Initial, $156,125, SRS-DMR

### Other

- **47D005** Community Day Care Center Program, Metropolitan Health Department, Nashville
  - 7/1/69-7/31/70, Continuation, $113,491, CHS-P
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

TEXAS

48D005 ACADEMIC PEDIATRICS UNIVERSITY OF TEXAS, GALVESTON
7/69-6/70, FY 1969, INITIAL, $45,144, NICH

48B010 DIAGNOSTIC AND EVALUATION CENTER FOR MENTALLY RETARDED CHILDREN UNIVERSITY OF DALLAS
7/1/69-6/30/70, CONTINUATION, $185,645. HSMHA-MCHS

48B015 EDUCATION PROGRAM FOR ALL RESIDENTIAL COUNSELORS MR RICHMOND STATE SCHOOL, RICHMOND
9/1/70-8/31/71, RENEWAL, $22,178. SRS-DMR

48B020 FIELD INSTRUCTION OF SOCIAL WORK STUDENTS UNIVERSITY OF TEXAS, AUSTIN
9/1/69-8/31/70, CONTINUATION, $25,489. SRS-DR

48B025 GRADUATE SOCIAL WORK STUDENT TRAINING PROJECT IN MENTAL RETARDATION WORKSHOP FOR SOCIAL WORKERS OUR LADY OF THE LAKE COLLEGE, SAN ANTONIO
7/1/70-6/30/71, CONTINUATION, $44,395. SRS-DMR

48B030 IMPROVE INSERVICE TRAINING PROGRAM OF INSTITUTION MR DENTON STATE SCHOOL, DENTON
7/1/70-6/30/71, INITIAL, $24,469. SRS-DMR

48B035 INSERVICE TRAINING FOR ALL LEVELS OF ATTENDANT PERSONNEL MR ABBELENE STATE SCHOOL, ABBELENE
7/1/70-6/30/71, RENEWAL, $23,750. SRS-DMR

48B040 INSERVICE TRAINING FOR ALL STAFF PERSONNEL MR MEXIA STATE SCHOOL, MEXIA
7/1/70-6/30/71, RENEWAL, $23,673. SRS-DMR

48B045 INSERVICE TRAINING MATERIALS DEVELOPMENT PROJECT MR RICHMOND STATE SCHOOL, RICHMOND
7/1/70-6/30/71, CONTINUATION, $19,859. SRS-DMR

48B046 INSERVICE TRAINING MENTAL RETARDATION SAN ANGELO CENTER, SAN ANGELO
7/1/70-6/30/71, INITIAL, $21,523. SRS-DMR

48B050 INSERVICE TRAINING PROGRAM FOR ATTENDANT PERSONNEL MR TRAVIS STATE SCHOOL, AUSTIN
7/1/70-6/30/71, CONTINUATION, $23,137. SRS-DMR

48B051 INSERVICE TRAINING PROGRAM LUBBOCK STATE SCHOOL, LUBBOCK
9/1/70-8/31/71, INITIAL, $21,573. SRS-DMR

48B055 MENTAL EVALUATION CLINIC BAYLOR UNIVERSITY, HOUSTON
7/1/69-6/30/70, CONTINUATION, $324,939. HSMHA-MCHS

48B065 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN EAST TEXAS STATE UNIVERSITY, COMMERCE
6/1/70-3/31/71, RENEWAL, $17,740. OE

48B070 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN INCARNATE WORD COLLEGE, SAN ANTONIO
6/1/70-3/31/71, RENEWAL, $17,800. OE

48B075 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN LAMAR STATE COLLEGE OF TECHNOLOGY, BEAUMONT
6/1/70-3/31/71, RENEWAL, $15,800. OE

48B080 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN MIDWESTERN UNIVERSITY, WICHITA FALLS
6/1/70-3/31/71, RENEWAL, $15,300. OE

48B068 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN PRAGUE SM 1/2 DAY SCHOOL, RICHMOND, VIRGINIA
6/1/70-3/31/71, RENEWAL, $17,400. OE

48B085 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN TEXAS TECHNOLOGY UNIVERSITY, LUBBOCK, TEXAS
6/1/70-3/31/71, RENEWAL, $14,000. OE

48B100 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN TEXAS TECHNOLOGY UNIVERSITY, LUBBOCK, TEXAS

COMMUNITY DAY CARE CENTER PROGRAM, METROPOLITAN HEALTH DEPARTMENT, NASHVILLE, TENNESSEE
8/1/70-7/31/71, CONTINUATION, $11,760. SRS-DMR

INSERVICE TRAINING IN BASIC SELF-CARE AND SOCIAL SKILLS, CLOVER BOTTOM HOSPITAL AND SCHOOL, DONELSON
9/1/69-8/31/70, CONTINUATION, $148. SRS-DMR

MR INITIAL STAFFING COMMUNITY CARE CENTERS OF N. NASHVILLE, NASHVILLE
7/1/70-6/30/71, CONTINUATION, $32,016. SRS-DMR

MR INITIAL STAFFING, CORDELL HULL ECONOMIC OPPORTUNITY CORP., LAFAYETTE
7/1/70-6/30/71, CONTINUATION, $107,956. SRS-DMR

MR INITIAL STAFFING, DAWN OF HOPE DEVELOPMENT CENTER, INC., JOHNSON CITY
7/1/70-6/30/71, CONTINUATION, $22,113. SRS-DMR

MR INITIAL STAFFING EMORY VALLEY SCHOOL OF ANDERSON CO., OAK RIDGE
7/1/70-6/30/71, INITIAL, $21,915. SRS-DMR

MR INITIAL STAFFING GREENE VALLEY HOSPITAL AND SCHOOL, GREENEVILLE
7/1/70-6/30/71, INITIAL, $18,414. SRS-DMR

MR INITIAL STAFFING, DE KALB COUNTY BOARD OF EDUCATION, SMITHVILLE
7/1/70-6/30/71, CONTINUATION, $31,113. SRS-DMR

MR INITIAL STAFFING GREENE VALLEY HOSPITAL AND SCHOOL, GREENEVILLE
7/1/70-6/30/71, INITIAL, $21,632. SRS-DMR

MR INITIAL STAFFING HARDEMAN CO. ASSOCIATION FOR RETARDED CHILDREN, TOONE
7/1/70-6/30/71, INITIAL, $15,570. SRS-DMR

MR INITIAL STAFFING, JACOB DAY CARE CENTER, JACKSON
7/1/70-6/30/71, CONTINUATION, $17,485. SRS-DMR

MR INITIAL STAFFING MEMPHIS-SHELBY CO. ASSOCIATION FOR RETARDED CHILDREN, MEMPHIS
7/1/70-6/30/71, INITIAL, $24,469. SRS-DMR

MR INITIAL STAFFING STATE PHYSICAL EDUCATION RESEARCH CENTER AND HOSPITAL, KNOXVILLE
7/1/70-6/30/71, INITIAL, $14,700. SRS-DMR

MR INITIAL STAFFING ORANGE GROVE CENTER FOR RETARDED, CHATTANOOGA
8/1/70-7/31/71, INITIAL, $23,577. SRS-DMR

MR INITIAL STAFFING ORANGE GROVE CENTER FOR THE RETARDED, INC., CHATTANOOGA
8/1/70-7/31/71, CONTINUATION, $11,760. SRS-DMR

MR INITIAL STAFFING SHELTERED OCCUPATIONAL SHOP, MEMPHIS
7/1/70-6/30/71, INITIAL, $25,377. SRS-DMR

MR INITIAL STAFFING, ST. PAUL'S LUTHERAN CHURCH DAY CARE CENTER, NASHVILLE
7/1/69-6/30/70, INITIAL, $39,649. SRS-DMR

MR INITIAL STAFFING SUNSHINE CENTER FOR HANDICAPPED, KNOXVILLE
7/1/70-6/30/71, INITIAL, $52,028. SRS-DMR

MR INITIAL STAFFING TEAM EVALUATION CENTER, INC., CHATTANOOGA
7/1/70-6/30/71, CONTINUATION, $10,284. SRS-DMR

MR INITIAL STAFFING WILSON CO. VOCATIONAL CENTER, LEBANON
7/1/70-6/30/71, INITIAL, $17,780. SRS-DMR

TRAINING FOR OLDER SEVERELY AND PROFOUNDLY RETARDED, GREENE VALLEY HOSPITAL AND SCHOOL, NASHVILLE
2/1/71-1/31/71, CONTINUATION, $17,256. SRS-DMR

TEAM EVALUATION CENTER FOR THE MULTIPLE HANDICAPPED STATE DEPARTMENT OF PUBLIC HEALTH, NASHVILLE
7/1/70-6/30/70, CONTINUATION, $26,925. HSMHA-MCHS

STUDENT WORK EXPERIENCE AND TRAINING, TUSCALOOSA COLLEGE, GREENEVILLE, TENNESSEE
6/1/70-6/30/71, INITIAL, $11,760. SRS-DMR

APPROVED SERVICE GRANT FOR MULTI-HANDICAPPED OF WILSON CO., GREENE VALLEY HOSPITAL AND SCHOOL, GREENEVILLE, TENNESSEE,
6/1/70-6/30/71, INITIAL, $23,232. SRS-DMR

DAY TRAINING FOR MULT-HANDICAPPED SEVERELY RETARDED CHILDREN, CHILD DEVELOPMENT CENTER, UNIVERSITY OF TENNESSEE MEDICAL UNITS, MEMPHIS, TENNESSEE
6/1/70-6/30/71, INITIAL, $21,511. SRS-DMR
## Construction, Training and Other Grants for Each State, 1970

**48B105** Preparation of Professional Personnel in the Education of Handicapped Children, Texas

**48B110** Preparation of Professional Personnel in the Education of Handicapped Children, University of Houston, Houston

**48B115** Preparation of Professional Personnel in the Education of Handicapped Children, University of Texas, Austin

**48B120** Rehabilitation Research and Training Center, University of Texas, Austin

**48B125** The Relation of Genetic Studies to Children With Mental Retardation of Texas, Galveston

**48B130** The Training of Graduate Students of Pedodontics in the Care of Handicapped Children, Baylor University, Dallas

**48B135** Training in Comprehensive Health Services for Children, University of Texas, Dallas

**48B140** Training in Interdisciplinary Comprehensive Child Health Services, University of Texas, Galveston

**48B145** Training of Attendant and Visiting Personnel, Mr. Lufkin State School, Lufkin

**48B150** Workshop on Role and Responsibility of the County Judge in Promoting and Supporting Local LEDP Programs and Services for MENTALLY RETARDED TEXAS DEPARTMENT OF MENTAL HEALTH AND MENTAL RETARDATION, Austin

**48B155** Human Rights for the Mentally Retarded School of Allied Health Professions of University of Texas Southwestern Medical School at Dallas Department of Rehabilitation Science, Dallas

### Construction

**48C005** Community Facilities Construction Harris County Center for the Retarded, Houston

**48C010** Community Facilities Construction Dallas County Mental Health and Mental Retardation Center, Dallas

**48C015** Community Facilities Construction Student Activity Center-Mexia State School, Mexia

**48C020** Community Facilities Construction Marbridge Ranch, Austin

**48C025** Community Facilities Construction Child Development Center-San Antonio Association for Retarded Children

**48C030** Community Facilities Construction Special Care School, Farmers Branch

### Other

**48D005** Child Development and Training Service, Denton State School, Denton

**48D010** Community Approach in Management of Dental Disease Retarded Harris County Center for Retarded, Houston

**48D016** Criminal Justice and Mentally Retarded Offenders Mexia State School, Mexia

**48D025** Develop Information-Education and Referral Service for State Texas Department of Mental Health-Retardation, Austin

**48D030** Developmental Recreation Program for Mental Retardates, Abilene State School, Abilene, Texas

**48D035** Mr. Initial Staffing Child Study Center, Fort Worth

**48D040** Mr. Initial Staffing Baytown Opportunity Center, Baytown

**48D045** Mr. Initial Staffing Community Sheltered Workshop, Fort Worth

**48D050** Mr. Initial Staffing Dallas Co. MH-MR Center, Dallas

**48D055** Mr. Initial Staffing Goodwill Industries of San Antonio, San Antonio

**48D060** Mr. Initial Staffing Midland Community Center for the Retarded, Midland

**48D065** Mr. Initial Staffing MH-MR Center, Austin-Travis Co., Austin

**48D070** Mr. Initial Staffing MH-MR Center, Austin-Travis County, Austin

**48D075** Mr. Initial Staffing MH-MR Center for Greater West Texas, San Angelo

**48D080** Mr. Initial Staffing MH-MR Center of Hidalgo Co., Edinburg

**48D085** Mr. Initial Staffing Marbridge Foundation for Retarded Children, Austin

**48D090** Mr. Initial Staffing Midland Community Center for MH-MR, Midland

**48D095** Mr. Initial Staffing San Antonio Association for Retarded, San Antonio

**48D100** Mr. Initial Staffing San Antonio Association for Retarded, San Antonio

**48D105** Mr. Initial Staffing St. Anthony's Special Education School, San Antonio

**48D110** Mr. Initial Staffing, St. Anthony's Special Education School, San Antonio

**48D115** Physical Development Program for Mental Retardates Abilene State School, Abilene

**48D120** Physical Development Program Semi-Ambulant Retarded, Richmond State School, Richmond

**48D125** Rehabilitation of Intractable Defective Delinquents, Mexia State School, Mexia

**48D130** Resident Training Project, Lufkin State School, Lufkin

**48D135** Social Development Program for Mental Retardates, Abilene State School, Abilene

**48D140** Student Work Experience and Training, Texas Department of Mental Health and Mental Retardation, Abilene, Texas

**48D145** Student Work Experience and Training, Austin State School, Austin, Texas
### Construction, Training and Other Grants for Each State, 1970

#### Utah

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<td>Field Instruction of Social Work Students</td>
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<td>49B005</td>
<td>Preparation of Professional Personnel</td>
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<td>49B010</td>
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<td>Expand Nursing Services</td>
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<td>51B020</td>
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**Community Facilities** University-Affiliated Facilities for Mental Retardation-Utah State University for Agriculture and Applied Science, Logan

6/1/70-8/31/70, Initial $3,068, SRS-DMR

6/15/70-8/31/70, Initial $6,500, SRS-DMR

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**Intensive Habit-Training Center** Utah State Training School, American Fork

7/1/70-8/31/71, Continuation $4,449, SRS-DMR

**MR Initial Staffing** Holladay Children's Center, Inc., Salt Lake City

7/1/70-8/31/71, Continuation $7,589, SRS-DMR

**MR Initial Staffing** Proud City Schools, Provo

7/1/70-8/31/71, Continuation $7,683, SRS-DMR

**MR Initial Staffing** Utah State Training School, American Fork

7/1/70-8/31/71, Initial $43,897, SRS-DMR

**MR Initial Staffing** Utah Valley Care and Training Center, Provo

7/1/69-8/31/70, Initial $9,415, SRS-DMR

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**Project Development** Salt Lake City School District, Salt Lake City

6/15/70-6/14/71, Initial $6,500, SRS-DMR

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**UTAH**

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**Field Instruction of Social Work Students**

University of Utah, Salt Lake City

9/1/69-8/31/70, Continuation $28,852, SRS-DMR

**Preparation of Professional Personnel**

Utah State Training School, American Fork

7/1/70-8/31/71, Continuation $13,465, SRS-DMR

**Interdisciplinary Training**

Special Project University Affiliated Faculty, Utah State University, Logan, Utah

6/1/70-8/31/71, Renewal $32,500, OE

**Preparation of Professional Personnel**

Education of Handicapped Children Brigham Young University, Provo

6/1/70-8/31/71, Renewal $30,500, OE

**Preparation of Professional Personnel**

State Superintendent of Public Instruction, Salt Lake City

6/1/70-8/31/71, Renewal $11,300, OE

**Preparation of Professional Personnel**

Education of Handicapped Children University of Utah, Salt Lake City

6/1/70-8/31/71, Renewal $73,500, OE

**Preparation of Professional Personnel**

Education of Handicapped Children Utah State University of Agriculture Applied Sciences, Logan

6/1/70-8/31/71, Renewal $30,500, OE

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**CONSTRUCTION**

**Community Facilities** University-Affiliated Facilities for Mental Retardation-Utah State University for Agriculture and Applied Science, Logan

10/29/70 Initial $50,000, SRS-DMR

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**Community Facilities** Construction Davis County School District, Farrington

6/29/70 Initial $156,650, SRS-DMR

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**OTHER**

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**EXPAND NURSING SERVICE STAFF DEVELOPMENT**

Program MR Lynchburg Training School and Hospital, Lynchburg

7/1/69-6/30/70, Renewal $13,565, SRS-DMR

**INSERVICE TRAINING FOR ATTENDANT PERSONNEL**

MR Petersburg Training School, Petersburg

7/1/69-6/30/70, Initial $25,000, SRS-DMR

**INSERVICE TRAINING MENTAL RETARDATION**

Lynchburg Training School and Hospital, Lynchburg

7/1/69-6/30/71, Initial $22,497, SRS-DMR

**INSERVICE TRAINING FOR ATTENDANT PERSONNEL**

MR Petersburg Training School, Petersburg

7/1/69-6/30/70, Initial $25,000, SRS-DMR

**NURSING IN MENTAL RETARDATION**

Medical College of Virginia, Richmond

7/1/69-6/30/70, Initial $22,497, SRS-DMR

**MENTAL RETARDATION**

University of Virginia, Charlottesville, Virginia, Virginia Commonwealth University, Richmond

7/1/70-6/30/71, Continuation $23,867, NICHD
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

51D020 CONFERENCE OF RETARDATE REPRESENTING RESIDENTS FOR RETARDATE AND WORKERS IN SHELTERED WORKSHOPS LYNCHBURG TRAINING SCHOOL AND HOSPITAL, LYNCHBURG 6/17/70-6/30/70 INITIAL $8,904. SRS-DMR
51D025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, MADISON COLLEGE, HARRISONBURG, VIRGINIA, 6/1/70-8/31/71, INITIAL $11,800. OE
51D030 SPECIAL PROJECTS, COOPERATIVE UNIVERSITY, SCHOOL DIVISION PLANNING TO DEVELOP A SPECIAL EDUCATION PRACTICUM LABORATORY IN A RURAL SETTING, VIRGINIA COMMONWEALTH UNIVERSITY, RICHMOND, VIRGINIA, 6/1/70-8/31/71, CONTINUING, $110,000. OE
51D035 FACILITY IMPROVEMENT, VALLEY WORKSHOP, LYNCHBURG 6/25/70-6/30/71, INITIAL $89,707. SRS-DMR
51D040 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, RALEIGH, NORTH CAROLINA, 6/1/70-8/31/71, INITIAL $5,987. SRS-DMR
51D045 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, OLD DOMINION UNIVERSITY, NORFOLK, VIRGINIA, 6/1/70-8/31/71, INITIAL $10,800. OE
51D050 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, RALEIGH, NORTH CAROLINA, 6/1/70-8/31/71, INITIAL $10,800. OE
51D055 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, TRIPOLI, PENNSYLVANIA, 6/1/70-8/31/71, INITIAL $5,987. SRS-DMR
51D060 PROJECT DEVELOPMENT, NEW RIVER VALLEY EDUCATION OF HANDICAPPED CHILDREN, RADFORD, VARTONIA, 6/1/70-5/31/71, INITIAL $7,500. OE
51D065 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, STATE BOARD OF EDUCATION, RICHMOND, VIRGINIA, 6/1/70-8/31/71, INITIAL $41,300. OE
51D070 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE, VIRGINIA, 6/1/70-8/31/71, INITIAL $65,029. OE
51D075 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, VIRGINIA COMMONWEALTH UNIVERSITY, RICHMOND, VIRGINIA, 6/1/70-8/31/71, INITIAL $42,000. OE
51D080 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, NORFOLK STATE COLLEGE, NORFOLK, VIRGINIA, 6/1/70-8/31/71, INITIAL $23,600. OE
51D085 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, VIRGINIA STATE COLLEGE, PETERSBURG, VIRGINIA, 6/1/70-8/31/71, INITIAL $20,500. OE

OTHER

51D090 CHILD EVALUATION CLINIC, NORFOLK STATE DEPARTMENT OF HEALTH, RICHMOND 6/1/70-8/31/70, CONTINUATION, $13,710. SRS-DMR
51D095 CHILDREN'S MULTIPLE HANDICAPPED DIAGNOSTIC AND TREATMENT EVALUATION CENTER, UNIVERSITY OF VIRGINIA, CHARLOTTESVILLE STATE DEPARTMENT OF HEALTH, RICHMOND, RICHMOND, VIRGINIA, 6/1/69-6/30/70, CONTINUATION, $212,000. HSMHA-MCHS
51D100 CONSULTATION AND EVALUATION CLINIC, RICHMOND STATE DEPARTMENT OF HEALTH, RICHMOND 6/1/69-6/30/70, CONTINUATION, $112,470. HSMHA-MCHS
51D105 CONSULTATION AND EVALUATION CLINIC, ROANOKE STATE DEPARTMENT OF HEALTH, RICHMOND 6/1/69-6/30/70, CONTINUATION, $5,759. SRS-DMR
51D110 A DEMONSTRATION DAYTIME DEVELOPMENT CENTER PROGRAMS FOR INSTITUTIONS FOR MENTALLY RETARDED CHILDREN, FAIRFAX COUNTY HEALTH DEPARTMENT, FAIRFAX, VIRGINIA, 8/1/69-7/14/70, CONTINUATION, $30,724. SRS-DMR
51D115 FACILITY IMPROVEMENT GRANT SHELTERED WORKSHOP OF LYNCHBURG INC., LYNCHBURG 11/17/70-12/31/71, CONTINUATION, $1,000. SRS-DA
51D120 HIP TOTAL ACTIVITY PROGRAM, LYNCHBURG TRAINING SCHOOL AND HOSPITAL, LYNCHBURG 6/25/70-6/30/71, INITIAL $89,707. SRS-DMR
51D125 FACILITY IMPROVEMENT, VALLEY WORKSHOP, WAYNESBORO 6/1/70-6/30/71, INITIAL $21,095. SRS-DMR
51D130 MENTAL RETARDATION CHILDREN'S CLINIC, RALEIGH, NORTH CAROLINA, 6/1/70-5/31/70, CONTINUATION, $25,769. HSMHA-MCHS
51D135 MR INITIAL STAFFING CHARLOTTE'S ASSOCIATION FOR RETARDED CHILDREN, HAMPTON 9/1/70-6/30/71 INITIAL $5,658. SRS-DMR
51D140 MR INITIAL STAFFING HOPE HOUSE FOUNDATION, NORFOLK 7/1/69-6/30/70, INITIAL $8,237. SRS-DMR
51D145 MR INITIAL STAFFING PENNSYLVANIA ASSN. FOR RETARDED CHILDREN, HAMPTON 9/1/70-6/30/71, CONTINUATION $24,765. SRS-DMR
51D150 PROJECT DEVELOPMENT, NEW RIVER VALLEY ASSOCIATION FOR RETARDED CHILDREN, RADFORD, VARTONIA, 6/1/70-8/31/71, INITIAL $2,700. SRS-RA
51D155 MR INITIAL STAFFING SHELTERED ENTERPRISES OF ALEXANDRIA, ALEXANDRIA 7/1/70-6/30/71 INITIAL $7,275. SRS-DMR
51D160 MR INITIAL STAFFING TIDewater VOCATIONAL CENTER, NORFOLK 7/1/70-6/30/71 INITIAL $43,016. SRS-DMR
51D165 MR INITIAL STAFFING TIDewater REHABILITATION INSTITUTE, NORTON 9/1/70-6/30/71, INITIAL $31,370. SRS-DMR
51D170 A MILEU FOR INTRA FAMILY RELATIONSHIPS FOR MENTALLY RETARDED ADULTS, NORTHERN VIRGINIA ASSOCIATION FOR RETARDED CHILDREN, ARLINGTON, VIRGINIA 12/1/69-2/28/70, INITIAL $5,330. CHS-P
51D175 STUDENT WORK EXPERIENCE AND TRAINING, CENTRAL STATE HOSPITAL, PETERSBURG, VIRGINIA, 6/1/70-5/31/71, INITIAL $113,710. SRS-DMR
51D180 STUDENT WORK EXPERIENCE AND TRAINING, SHELTERED ENTERPRISES OF ALEXANDRIA INC., ALEXANDRIA, VIRGINIA, 6/7/70-6/14/71, INITIAL $5,560. SRS-DMR
51D185 A MILEU FOR THE DEVELOPMENT OF MEANINGFUL INTER-PERSONAL AND INTRA-FAMILY RELATIONSHIPS FOR THE MENTALLY RETARDED CHILD, NORTHERN VIRGINIA ASSOCIATION FOR RETARDED CHILDREN, ARLINGTON, VIRGINIA 12/1/69-11/30/70, CONTINUATION $15,470. SRS-DMR
51D190 DAY CARE CENTER FOR MENTALLY RETARDED CHILDREN AND ADULTS, TIDewater ASSOCIATION FOR RETARDED CHILDREN, NORFOLK, VIRGINIA, 6/25/70-6/30/71, INITIAL $66,747. SRS-DMR

VIRGIN ISLANDS

TRAINING

52B005 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN VIRGIN ISLANDS DEPARTMENT OF EDUCATION, CHARLOTTE AMALIE 6/1/70-8/31/71, RENEWAL, $5,300. OE

WASHINGTON

TRAINING

53B003 ANNUAL MR WORKSHOP FOR STATE OF WASHINGTON, UNIVERSITY OF WASHINGTON, SEATTLE 7/1/69-6/30/70, INITIAL $7,500. HSMHA-MCHS
53B005 COMPREHENSIVE TRAINING IN MENTAL RETARDATION CHILD DEVELOPMENT UNIVERSITY OF WASHINGTON, SEATTLE 7/1/69-6/30/70, CONTINUATION, $752,870. HSMHA-MCHS
53B015 FIELD INSTRUCTION OF SOCIAL WORK STUDENTS UNIVERSITY OF WASHINGTON, SEATTLE 6/1/70-5/31/71, CONTINUATION, $28,107. HSMHA-MCHS
53B015 INSERVICE TRAINING FOR ATTENDANT COUNSELORS AND OTHER STAFF MR RAINIER SCHOOL, BUCKLEY 7/1/69-6/30/70, RENEWAL, $17,312. SRS-DMR
CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

53B020 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN CENTRAL WASHINGTON STATE COLLEGE, ELLensburg 6/1/70-8/31/71, RENEWAL $55,108. OSR-DMR

53B025 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN, STATE DEPARTMENT OF PUBLIC INSTRUCTION, OLYMPIA 6/1/70-8/31/71, RENEWAL $15,400. OSR-DMR

53B030 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF WASHINGTON, SEATTLE 6/1/70-8/31/71, RENEWAL $45,600. OSR-DMR

53B035 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN WESTERN WASHINGTON STATE UNIVERSITY, BILLINGHAM, WASHINGTON, 6/1/70-8/31/71, RENEWAL $11,500. OSR-DMR

53B040 TRAINING FOR ATTENDANT AND PROFESSIONAL STAFF MR YAKIMA VALLEY SCHOOL, SELAH 7/1/70-6/30/71 INITIAL $21,779. OSR-DMR

53B045 TRAINING FOR NURSING IN MENTAL RETARDATION UNIVERSITY OF WASHINGTON, SEATTLE 7/1/69-6/30/70, CONTINUATION $90,961. HSMHA-MCHS

53B050 TRAINING PRIMARILY FOR ATTENDANT PERSONNEL MR FIRCREST SCHOOL, SEATTLE 7/1/69-6/30/70, RENEWAL $25,000. OSR-DMR

53B055 TRAINING FOR SUPERVISORY AND ATTENDANT PERSONNEL MR LAKELAND VILLAGE, MEDICAL LAKE 7/1/69-6/30/70, RENEWAL $20,227. OSR-DMR

53B060 WORKSHOP ON NUTRITION: UNIVERSITY AFFILIATED FACILITIES, UNIVERSITY OF WASHINGTON, SEATTLE 7/1/69-6/30/70, INITIAL $19,405. HSMHA-MCHS

53B065 INSERVICE TRAINING MENTAL RETARDATION LAKELAND VILLAGE, MEDICAL LAKE 7/1/69-6/30/70, INITIAL $24,300. OSR-DMR

53B070 TRAINING FOR TRANSITION TO SIX BED MODULE UNITS FIRCREST SCHOOL, SEATTLE 7/1/70-6/30/71 INITIAL, $22,500. OSR-DMR

53B075 INSERVICE TRAINING AND STAFF DEVELOPMENT RAINER SCHOOL, BUCKLEY 7/1/70-6/30/71 INITIAL, $22,500. OSR-DMR

CONSTRUCTION

53C005 COMMUNITY FACILITIES CONSTRUCTION CHELAN COUNTY PRC GROUP HOME, EAST WENTACHEE 6/25/70 INITIAL $50,400. OSR-DMR

53C010 COMMUNITY FACILITIES CONSTRUCTION PARKVIEW HOME FOR EXCEPTIONAL CHILDREN, SEATTLE 6/29/70 INITIAL $50,496. OSR-DMR

53C015 COMMUNITY FACILITIES CONSTRUCTION FIRCREST STATE SCHOOL ACTIVITY CENTER, SEATTLE 6/26/70 INITIAL $465,904. OSR-DMR

OTHER

53D005 A VOCATIONAL TRAINING PROGRAM FOR MENTALLY RETARDED, LAKELAND VILLAGE, MEDICAL LAKE 6/1/70-5/31/71 CONTINUATION $71,931. OSR-DMR

53D006 ADAPTING INSTITUTION SERVICES TO SIX-BED UNITS FIRCREST SCHOOL, SEATTLE 6/25/70-5/31/71 INITIAL $96,588. OSR-DMR

53D010 AN OPERANT CONDITIONING EDUCATION AND TRAINING UNIT, RAINEy SCHOOL, BUCKLEY 6/1/70-5/31/71 CONTINUATION $94,933. OSR-MDM

53D015 CLINIC FOR CHILD STUDY, UNIVERSITY OF WASHINGTON, SEATTLE STATE DEPARTMENT OF HEALTH, OLYMPIA 7/1/69-6/30/70, CONTINUATION $116,961. HSMHA-MCHS

53D016 COGNITIVE SHELLS FOR MULTIPLY HANDICAPPED RETARDEy YAKIMA VALLEY SCHOOL, SELAH 6/22/70-5/31/71 INITIAL $89,692. OSR-DMR

53D035 FACILITY IMPROVEMENT GRANT OLYMPIC PENINSULA ENTERPRISES, INC., BREMERTON 5/1/70-4/30/71 CONTINUATION $131,420. OSR-DMR

53D040 MR INITIAL STAFFING CHILDREN'S ORTHOPEDIC HOSPITAL AND MEDICAL CENTER, SEATTLE 7/1/70-6/30/71 INITIAL $17,325. OSR-DMR

53D049 MR INITIAL STAFFING FAMILY COUNSELING SERVICE, SPOKANE 9/1/69-8/31/70 INITIAL $9,562. OSR-DMR

53D050 MR INITIAL STAFFING, FIRCREST SCHOOL, SEATTLE 9/1/70-8/31/71 CONTINUATION $5,162. OSR-DMR

53D055 MR INITIAL STAFFING, HILLTOP NEIGHBORHOOD IMPROVEMENT COUNCIL, INC., TACOMA 9/1/70-8/31/71 CONTINUATION $33,489. OSR-DMR

53D060 MR INITIAL STAFFING KITITAS CO. DEVELOPMENT CENTER, ELLensburg, WASHINGTON, 7/1/70-6/30/71 INITIAL, $22,300. OSR-DMR

53D065 MR INITIAL STAFFING, LILLEG RICE ACTIVITY CENTER, WALLA WAllA 9/1/70-8/31/71 CONTINUATION $21,276. OSR-DMR

53D070 MR INITIAL STAFFING, LOWER PUGET SOUND DEVELOPMENT CENTER, INC., OLYMPIA 9/1/70-8/31/71 CONTINUATION $6,558. OSR-DMR

53D075 MR INITIAL STAFFING, NORTHWEST CENTER FOR RETARDED, SEATTLE 9/1/70-8/31/71 CONTINUATION $7,420. OSR-DMR

53D076 MR INITIAL STAFFING PARK VIEW HOMES FOR EXCEPTIONAL CHILDREN, SEATTLE 7/1/70-6/30/71 INITIAL $18,471. OSR-DMR

53D077 MR INITIAL STAFFING PROGRESS CENTER INC., LONGVIEW 9/1/70-8/31/71 INITIAL $12,853. OSR-DMR

53D080 MR INITIAL STAFFING SEATTLE PARKS AND RECREATION DEPT. SEATTLE 7/1/70-6/30/71 INITIAL $11,361. OSR-DMR

53D081 MR INITIAL STAFFING SPOKANE SAVIC CHILDREN'S CLINIC AND PRESCHOOL, SEATTLE 7/1/70-6/30/71 INITIAL $17,610. OSR-DMR

53D083 MR INITIAL STAFFING SOUTH KING CO. ACTIVITY CENTER, KENT 7/1/70-6/30/71 INITIAL $33,900. OSR-DMR

53D085 MR INITIAL STAFFING THE ANTONIA SCHOOL FOR SPECIAL CHILDREN, SPOKANE, WASHINGTON 9/1/70-8/31/71 INITIAL $43,290. OSR-DMR

53D090 MR INITIAL STAFFING, TACOMA GUILDS FOR RETARDED CHILDREN, TACOMA 9/1/70-8/31/71 CONTINUATION $8,460. OSR-DMR

53D095 MR INITIAL STAFFING, TACOMA PIERCE CO. CHAPTER, WASH. ASSN. FOR RETARDED CHILDREN, TACOMA 9/1/70-8/31/71 CONTINUATION $8,275. OSR-DMR

53D096 MR INITIAL STAFFING UNIVERSITY OF PUGET SOUND, TACOMA 9/1/70-7/31/71 INITIAL $32,800. OSR-DMR

53D097 MR INITIAL STAFFING UNITED CEREBRAL PALSY OCCUPATIONAL TRAINING CENTER, KENNEWICK 7/1/70-6/30/71 INITIAL $7,325. OSR-DMR

53D100 MR INITIAL STAFFING, WHATCOM ASSN. OF TRAINING CENTERS, INC., BELLINGHAM 9/1/70-8/31/71 CONTINUATION $7,311. OSR-DMR

53D105 STUDENT WORK EXPERIENCE AND TRAINING, SPOKANE COUNTY CHAPTER WASHINGTON ASSOCIATION FOR RETARDED CHILDREN, SPOKANE, WASHINGTON, 6/25/70-5/31/70, INITIAL $2,400. OSR-DMR

53D110 STUDENT WORK EXPERIENCE AND TRAINING, SKAGIT PRESCHOOL FOR RETARDED CHILDREN, BURLINGTON, WASHINGTON 6/25/70-5/31/70, INITIAL $1,400. OSR-DMR

53D115 STUDENT WORK EXPERIENCE AND TRAINING, WENATCHEE, WASHINGTON 6/25/70-5/31/70, INITIAL $5,850. OSR-DMR

53D120 STUDENT WORK EXPERIENCE AND TRAINING, WENATCHEE, WASHINGTON 6/25/70-5/31/70, INITIAL $5,850. OSR-DMR

53D125 FORESTRY PREVOCATIONAL TRAINING FOR RETARDED YOUTHS AGE 13-17, WASHINGTON ASSOCIATION FOR RETARDED CHILDREN, WENATCHEE, WASHINGTON 6/25/70-5/31/70, INITIAL $8,350. OSR-DMR
### WEST VIRGINIA

**TRAINING**

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<td>55B015</td>
<td>Field instruction of social work students</td>
<td>University of Wisconsin, Madison</td>
<td>9/1/69-8/31/70</td>
<td>$36,635, SRS-RSA</td>
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<td>55B035</td>
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<td>55B036</td>
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<td>55D010</td>
<td>An enrichment program to reduce physical restraint</td>
<td>Southern Wisconsin Colony and Training School, Union Grove</td>
<td>6/1/70-6/30/71</td>
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<td>55D015</td>
<td>Community service demonstration project for mentally retarded rural area state</td>
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<td>9/1/69-6/30/70</td>
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### WISCONSIN

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<td>55B005</td>
<td>Field instruction of rehabilitation counseling students</td>
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<td>A vocational and social adjustment training program</td>
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<td>Community service demonstration project for mentally retarded rural area state</td>
<td>Wisconsin Department of Health and Social Service, Madison</td>
<td>9/1/69-6/30/70</td>
<td>$35,526, CHS-P</td>
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CONSTRUCTION, TRAINING AND OTHER GRANTS FOR EACH STATE, 1970

55D016 MOTIVATING FAMILIES OF MULTI-HANDICAPPED RETARDATES CENTRAL WISCONSIN COLONY AND TRAINING SCHOOL, MADISON
9/1/69-8/31/70 INITIAL $26,257. SRS-DMR

55D017 USING A WORKSHOP TO NORMALIZE SEVERELY RETARDED ADULTS CENTRAL WISCONSIN COLONY AND TRAINING SCHOOL, MADISON
5/1/70-4/30/71 INITIAL $13,743. SRS-DMR

55D020 FACILITY IMPROVEMENT, MARATHON COUNTY WORKSHOP FOR THE HANDICAPPED, WAUSAU
12/1/69-11/30/70, INITIAL $20,687. SRS-RSA

55D030 MR INITIAL STAFFING, BROWN CO. ASSN. FOR RETARDED CHILDREN, INC., GREEN BAY
7/1/70-6/30/71 CONTINUATION $55,233. SRS-DMR

55D035 MR INITIAL STAFFING MANITOWOC COUNTY BOARD, MANITOWOC
8/1/70-7/31/71 INITIAL $147,300. SRS-DMR

55D040 MR INITIAL STAFFING UNITED CEREBRAL PALSY OF KENOSHA, KENOSHA
7/1/70-6/30/71 INITIAL $22,958. SRS-DMR

55D045 MR INITIAL STAFFING, WALWORTH COUNTY, ELKHORN
9/1/70-8/31/71 CONTINUATION $41,272. SRS-DMR

56B005 INSERVICE TRAINING PROGRAM FOR WARD AIDES MR WYOMING STATE TRAINING SCHOOL, LANDER
7/1/70-6/30/71 CONTINUATION, $41,272. SRS-DMR

56B010 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN STATE DEPARTMENT OF EDUCATION, CHEYENNE
6/1/70-8/31/71, RENEWAL, $43,500. OE

56B015 PREPARATION OF PROFESSIONAL PERSONNEL IN THE EDUCATION OF HANDICAPPED CHILDREN UNIVERSITY OF WYOMING, LARAMIE
6/1/70-8/31/71, RENEWAL, $11,500. OE

56B020 WORKSHOP FOR DAY CENTER PERSONNEL MENTAL HEALTH AND MENTAL RETARDATION SERVICES, CHEYENNE
7/1/70-6/30/71 INITIAL, $1,932. SRS-DMR

CONSTRUCTION

56C005 COMMUNITY FACILITIES CONSTRUCTION WYOMING STATE TRAINING SCHOOL, LANDER
6/19/70 INITIAL $100,000. SRS-DMR

OTHER

56D005 CHILD DEVELOPMENT CENTER, CHEYENNE STATE DEPARTMENT OF PUBLIC HEALTH, CHEYENNE
7/1/69-6/30/70, CONTINUATION, $51,539. HSMHA-MCHS

56D015 MR INITIAL STAFFING, NATRONA CO. HIGH SCH. DIST. AND SCH. DIST. NO. 2, CASPER
9/1/70-8/31/71 CONTINUATION $11,083. SRS-DMR

56D016 MR INITIAL STAFFING NATRONA CO HIGH SCH. DIST. AND SCH. DIST. NO. 2, CASPER
9/1/70-8/31/71 INITIAL $11,083. SRS-DMR

56D020 SENSORY STIMULATION IN TRAINING THE PROFOUNDLY RETARDED CHILDREN WYOMING STATE TRAINING SCHOOL, LANDER CHILDREN
4/1/70-3/31/71 CONTINUATION $85,865. SRS-DMR
RESEARCH AND DEMONSTRATION GRANTS, 1970

ETIOLOGY

A015 ABO ERTHROBLASTOSIS, HD-3972-12, ROSENFIELD, ROBERT E.; MT. SINAI SCHOOL OF MEDICINE, NEW YORK; 4/70-3/71; CONTINUATION; $93,649. NICHD

THE AIMS OF THIS RESEARCH ARE TO DEFINE THE IMMUNOCHEMICAL PARAMETERS UNDERLYING THE DEVELOPMENT OF ABO ERTHROBLASTOSIS, AND TO DESIGN NEW QUANTITATIVE PERNATAL TESTS WITH WHICH TO ESTIMATE ACCURATELY THE SEVERITY OF ANTICIPATED DISEASE.

A020 ABNORMAL DEVELOPMENT OF THE NERVOUS SYSTEM, NS-6188-05, LANGMAN, JAN; UNIVERSITY OF VIRGINIA SCHOOL OF MEDICINE CHARLOTTESVILLE, VIRGINIA; UNIVERSITY 9/69-8/70, CONTINUATION; $42,087. NINDS

THIS RESEARCH PROPOSES TO DETERMINE WHETHER VITAMIN A IN VITRO INHIBITS CELL DIVISION, WHAT IS THE PRECISE LOCALIZATION OF VITAMIN A IN THE CELL, AND WHETHER VITAMIN A INFLUENCES THE NORMAL DIFFERENTIATION OF THE NEUROBLASTS, WHETHER IT INTERFERES WITH CELL PROLIFERATION, ALSO TO BE EXAMINED IS WHETHER LABELED CELLS PENETRATE INTO THE CENTRAL NERVOUS SYSTEM OF THE UNLABELED EMBRYO AND WHETHER NEUROBLASTS ARE CHARACTERIZED BY A SPECIFIC PROTEIN.

A025 ALTERATION OF NEONATAL BRAIN BY MATERNAL NUTRITION, NS 8723-02, (PRECEDED BY HD-8043) ZAMENHOF, STEPHEN; UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF, 2/70-7/71, CONTINUATION; $14,879. NINDS

INVESTIGATING MALNUTRITION FACTORS WHICH INFLUENCE THE DNA IN THE BRAIN (REFLECTED BY THE NUMBER OF BRAIN CELLS) AND RELATIONSHIPS BETWEEN ALTERATIONS IN BRAIN CELL NUMBER AND BEHAVIOR PARAMETERS. PROTEIN DEPRIVATION BEFORE AND AFTER BIRTH MAY RESULT IN MENTAL IMPAIRMENT IN CHILDREN.

A030 ALTERING BILIRUBIN METABOLISM AND KERNICTERUS BY DRUGS, NS 4925-07, SPRATT, JAMES L.; STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA, 9/69-8/70, CONTINUATION; $20,621. NINDS

THIS RESEARCH CONCERNS ATTEMPTS TO CAUSE STIMULATION OF BILIRUBIN CONJUGATION BY GLUCURONYL TRANSFERASE. THE STUDIES WILL BE PERFORMED WITH NEWBORN ANIMALS AND BOTH IN VIVO AND IN VITRO TECHNIQUES WILL BE UTILIZED.

A035 AMINO ACID REQUIREMENTS OF PREMATURE INFANTS; (1) HD-02760-0351, (2) HD-02760-04; SNYDERMAN, SELMA E.; NEW YORK UNIVERSITY, NEW YORK, NEW YORK; (1) 7/10-3/70, (2) 4/70-3/71; (1) CONTINUATION; (2) RENEWAL; (1) $16,395, (2) $15,663, NICH.D

THE PURPOSE OF THIS STUDY IS TO DETERMINE WHICH AMINO ACIDS ARE ESSENTIAL FOR PREMATURE INFANTS AND HOW MUCH AMOUNTS. THE PLAN IS TO PROVIDE A BASEL IET WITH NITROGEN IN THE FORM OF 14-AMINO ACIDS IN RATIOS FOUND IN HUMAN MILK. THE ESSENTIAL AMINO ACIDS WILL BE WITHDRAWN ONE BY ONE FROM THE SYNTHETIC AMINO ACID MIXTURE AND CHANGES WHICH CAN BE DETECTED AS A RESULT OF THE DEletion WILL BE DETERMINED FROM GROWTH RATE, NITROGEN RETENTION, AND BLOOD AMINO ACID LEVELS.

A040 BACTERIURI A IN THE PREMATURE INFANT, HD-03382-03; HODGMAN, JOAN E.; LOS ANGELES COUNTY DEPT OF HOSP., LOS ANGELES, CALIFORNIA; 4/70-5/71; CONTINUATION; $47,757. NICHD.

THIS RESEARCH PROPOSES TO DEVELOP REPRODUCIBLE METHODS FOR THE DETECTION OF SIGNIFICANT BACTERIURI A IN PREMATURE INFANTS. THE STUDIES WILL BE PERFORMED WITH NEWBORN ANIMALS TO DEVELOP A BASELINE WITH WHICH TO COMPARE PROTEIN SYNTHESIS IN BRAIN PREPARED FROM HORMONE TREATED RATS.

A045 BEHAVIOR IN THE PROGENY OF UNDERFEED MOTHERS; HD-2984-04; CHOW, BACON F.; JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND; 6/70-5/71; CONTINUATION; $53,744. NICHD.

THIS RESEARCH CONCERNS MALE PROGENY OF MOTHER RATS RESTRICTED TO 50% OF THEIR NORMAL FOOD INTAKE DURING PREGNANCY AND LACTATION. THEIR PERFORMANCE IN COMPARISON WITH NORMAL PROGENY WILL BE EVALUATED BY ACTIVITY IN A WHEEL CAGE, RUNNING PATTERNS IN A FIELD BOX, CONDITIONED EMOTIONAL RESPONSES, MAZE RUNNING AND AVOIDANCE- ESCAPE RESPONSES.

A046 BILIRUBIN METABOLISM DURING THE PERINATAL PERIOD; HD-03149-03; THALER, M. MICHAEL; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CALIFORNIA; 6/70-5/71; RENEWAL; $64,334. NICHD.

THIS RESEARCH IS TO INVESTIGATE DEVELOPMENTAL CHANGES IN THE PROCESSES OF CONJUGATION AND BILIARY EXCRETION OF BILE PIGMENT BEFORE AND AFTER BIRTH.

A047 BIOCHEMICAL AND ANIMAL STUDIES IN MENTAL RETARDATION; (1) HD-00341-09S1, (2) HD-00341-10; WAISMAN, HARRY AARON; UNIVERSITY OF WISCONSIN; MADISON, WISCONSIN; (1) 5/70-11/70, (2) 6/70-5/71; RENEWAL; (1) $53,044, (2) $19,600. NICHD.

THIS RESEARCH CONCERNS: MAPPING-OF IN VIVO BRAIN PROTEIN SYNTHESIS BY DEACETYLASE CHROMATOGRAPHY OF ONE SYTOPLASMIC AND TWO PARTICULATE FRACTIONS FOR 3-DAY OLD AND 10-DAY RATS. DATA FROM THIS STUDY WILL PROVIDE A BASELINE WITH WHICH TO COMPARE PROTEIN SYNTHESIS IN BRAIN PREPARED FROM HORMONE TREATED RATS.

A048 BIOCHEMICAL AND BIOLOGICAL PROBLEMS OF MENTAL RETARDATION; HD-05061-01, POPJAK, GEORGE J.; UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIFORNIA; 6/70-5/71; INITIAL; $79,109. NICHD.

OF THE TWO PROJECTS INVOLVED IN THIS RESEARCH THE FIRST IS CONCERNED WITH THE MORPHOLOGICAL AND BIOCHEMICAL DEVELOPMENT OF THE HUMAN CENTRAL NERVOUS SYSTEM. AN ATTEMPT WILL BE MADE TO CORRELATE THE DEVELOPMENT OF SUBCELLULAR STRUCTURES AND THE BIOCHEMICAL DEVELOPMENT OF ENZYME SYSTEMS DIRECTLY RELATED TO CNS FUNCTIONING. THE SECOND PROJECT IS DIRECTED TOWARD THE DEVELOPMENT OF A MODEL OF PHENYLKETONURIA IN ANIMALS AND THE TREATMENT OF PHENYLKETONURIC INFANTS BY 'COLONIZATION' OF THEIR LIVER WITH NORMAL LIVER CELLS.

A049 BIOCHEMICAL EVENTS PRECEDING BIRTH DEFORMS; HD-04269-01A1, CHEPENIK, KENNETH P.; WAKE FOREST UNIVERSITY, WINSTON-SALEM, NORTH CAROLINA; 6/70-5/71; INITIAL; $20,163. NICHD.

THE GOAL OF THIS PROJECT IS TO EXAMINE EMBRYONIC METABOLISM AS IT IS AFFECTED IN A TERATOGENIC SITUATION. THE SPECIFIC AIMS ARE (1) TO DETERMINE THE BIOCHEMICAL BASIS FOR THE ALTERATIONS IN LEVELS OF HIGH ENERGY PHOSPHATE COMPOUNDS IN TERATOGEN-TREATED RAT EMBRYOS, (2) TO BEGIN TO RELATE THE ALTERED SEQUENCES OF MOLECULAR ENZYMIC ONTOGENY FOUND WITH ELECTROPHORETIC ANALYSIS OF ABNORMAL EMBRYOS TO DISTURBANCES IN METABOLISM OF THESE EMBRYOS, (3) TO DETERMINE WHETHER OR NOT THE TERATOGEN-INDUCED ALTERATIONS IN ATP, ADP AND AMP ARE A GENERAL OR ORGAN SPECIFIC PHENOMENON IN THE ABNORMALLY DEVELOPING RAT EMBRYO AND (4) TO CREATE A FORMAT FOR COMPARATIVE STUDIES OF THE MECHANISM OF ACTION OF VARIOUS TERATOGENS.

A050 SYNTHESIS AND METABOLISM OF GALACTOLIPIDS, NS 1575-13, BURTON, ROBERT M.; WASHINGTON UNIVERSITY SCHOOL OF MEDICINE, ST. LOUIS, MO; 4/70-3/71, CONTINUATION; $47,757. NICHD.

THIS RESEARCH WILL STUDY METABOLIC PATHWAYS CONCERNING GALACTOLIPIDS THROUGH THE ISOLATION AND CHARACTERIZATION OF INDIVIDUAL ENZYME ACTIVITIES.

A051 BIOSYNTHESIS AND UTILIZATION OF CERAMIDE BY BRAIN NS 9049-01, MOLLER, PIERRE; YESHIVA UNIVERSITY, NEW YORK, N.Y.; 1/70-12/70, INITIAL; $29,505. NINDS.

RESEARCH ON THE BIOSYNTHETIC PATHWAYS INVOLVED IN THE FORMATION AND UTILIZATION OF CERAMIDE BY BRAIN...
This research is concerned with the capacity of infants to maintain an adequate secretion of catecholamines and to undergo stress associated with hypercapnia, acidosis, recurrent hypoglycemia, and alterations in renal function due to any of two types: (1) blood studies — pH, PCO2 (arterial), glucose, plasma pressor activity (arterial), blood cultures, and serum electrolytes for the first five days of life, and (2) urine studies — daily urine collections for five days to measure vanilmandelic acid excretion.

This research is concerned with investigating cellular aspects of mammalian developmental processes along three principal lines: (1) studies on genetics and genetic biochemistry of mammalian development; (2) study of the dynamics of cell reproduction and differentiation in specific tissues and the relationship of these processes to specific gene action; and (3) the investigation of specific human and animal disease situations where the parameters studied are among the first two. This program may be involved in the pathological process.

This research proposes to determine whether there are any differences in the incidence and severity of central nervous system sequelae between the 3- and 4-protein diet groups and to study the relationship between clinical parameters obtained during the infants' stay in the premature nursery and the later presence or absence of central nervous system sequelae.

The research objectives of this project are to study the developmental interrelationships between the embryonic brain and its vascular system. An analysis is being made of the effects of nitrous, differentiation, and migration of nervous tissue on the development of cerebrovascular elements. Reciprocal effects of the vascular system on the morphogenesis and histogenesis of the brain are likewise being explored. These influences will be determined during normal and abnormal development in chick embryos. A variety of techniques will be employed in this project, including radioautography, histochemistry, and tissue culture.

This research concerns diet therapy and close observation of children presently under treatment for maple syrup urine disease. The formation of dihydroxyacetone is being investigated as a possible means of differentiating the heterozygous carrier of the disease from the normal.

Comparative studies in perinatal toxicology; HD-0385-01A1; Yeary, Roger A.; Ohio State University, Columbus, Ohio; 10/69-6/70; Initial, $15,956; NICHD
THIS PROPOSED RESEARCH IS DESIGNED TO INVESTIGATE THE TOXICOLOGICAL SIGNIFICANCE OF DEFICIENT URIDINE DIFFERENTIAL PRODUCTION OF THE LIVER AND BLOOD IN THE MATURE FETAL LAMB. THE OBJECTIVES OF THIS PROJECT ARE AS FOLLOWS: (1) TO DETERMINE THE QUANTITY AND COMPOSITION OF INTRA-ALVEOLAR FLUID IN THE MATURE FETAL LAMB UNDER EXPERIMENTAL CONDITIONS THAT ARE PHYSIOLOGICALLY OPTIMAL. (2) TO DETERMINE THE ALTERATIONS IN QUANTITY AND COMPOSITION OF THE FLUID IN THE FETAL LAMB DURING HYPOXEMIA AND ACIDEMIA AND DURING THE IMMEDIATE RECOVERY PERIOD FOLLOWING HYPOXEMIA AND ACIDEMIA. AND (3) TO DETERMINE IN THE FETAL LAMB THE EFFECTS OF PULMONARY MECHANICS THAT MAY BE ASSOCIATED WITH ALTERATIONS IN INTRA-ALVEOLAR FLUID PRODUCTION OF APNEA AND THE IMMEDIATE POST-APNEA PHASE.

A120 CYTOGENETIC STUDIES IN MENTAL RETARDATION. HD-00359-10, BREUER, W. ROY, CONNECTICUT STATE DEPT. OF HEALTH, SOUTHINGTON, CONNECTICUT, 6/70-7/71, CONTINUATION; $17,107. NICHD.

A121 CYTOGENESIS OF EMBRYONIC HUMAN NERVOUS SYSTEM. NS-7053-03, SIDMAN, RICHARD L., HARVARD MEDICAL SCHOOL, BOSTON, MASS., 9/69-8/70, RENEWAL; $51,875; NICHD.

A122 CYTOLOGICAL STUDIES IN HUMAN GENETICS. HD-04144-02, GENNARO, JAMES F., LAFAYETTE III, COMMUNITY BLOOD COUNCIL GREATER NEW YORK; NEW YORK, 9/69-8/70, RENEWAL; $31,875; NICHD.

A123 DEVELOPMENTAL PATIOTHY. HD-03298-06, BENNISONS, KURT, DARTMOUTH COLLEGE, HANOVER, NEW HAMPSHIRE, 9/69-8/70; INITIAL; $42,265; NICHD.

A124 DETECTION AND STUDY OF INBORN ERRORS. HD-3967-07, GUTHRIE, ROBERT, STATE UNIVERSITY OF NEW YORK, BUFFALO, NEW YORK, 4/70-7/71, CONTINUATION $48,012; NICHD.

A125 DETECTIO AND STUDY OF INBORN ERRORS. HD-3967-07, GUTHRIE, ROBERT, STATE UNIVERSITY OF NEW YORK, BUFFALO, NEW YORK, 4/70-7/71, CONTINUATION $48,012; NICHD.

A126 DETECTION AND STUDY OF INBORN ERRORS. HD-3967-07, GUTHRIE, ROBERT, STATE UNIVERSITY OF NEW YORK, BUFFALO, NEW YORK, 4/70-7/71, CONTINUATION $48,012; NICHD.

A140 CYCLIC PHOSPHODIESTERASE OF CENTRAL NERVOUS SYSTEM NS-3059-03, CHUNG, WAT Y., ST. JUDE CHILDREN'S RESEARCH HOSPITAL, MEMPHIS, TENN. 9/70-12/71, RENEWAL $29,688 NINDS.

A141 CYTOSPHOSPHINE METABOLISM IN BRAIN. NS-4454-07, BROWN, FOUNTAIN CHRISTINA, UNIVERSITY OF TENNESSEE, MEMPHIS, TENN., 9/69-8/70, RENEWAL $16,200; NINDS.

A142 CYTOGENETIC STUDIES IN HUMAN GENETICS. HD-04144-02, GENNARO, JAMES F., LAFAYETTE III, COMMUNITY BLOOD COUNCIL GREATER NEW YORK; NEW YORK, 9/69-8/70, RENEWAL; $31,875; NICHD.

A143 CYTOSPHOSPHINE METABOLISM IN BRAIN. NS-4454-07, BROWN, FOUNTAIN CHRISTINA, UNIVERSITY OF TENNESSEE, MEMPHIS, TENN., 9/69-8/70, RENEWAL $16,200; NINDS.

A144 CYTOLOGICAL STUDIES IN HUMAN GENETICS. HD-04144-02, GENNARO, JAMES F., LAFAYETTE III, COMMUNITY BLOOD COUNCIL GREATER NEW YORK; NEW YORK, 9/69-8/70, RENEWAL; $31,875; NICHD.

A145 CYTOSPHOSPHINE METABOLISM IN BRAIN. NS-4454-07, BROWN, FOUNTAIN CHRISTINA, UNIVERSITY OF TENNESSEE, MEMPHIS, TENN., 9/69-8/70, RENEWAL $16,200; NINDS.

A146 EFFECT OF AMINO ACID LEVELS ON PROTEIN BIOSYNTHESIS. HD-03691-05, RUDOLPH, NATHAN, MONAMIDON MEDICAL CENTER, NEW YORK, NEW YORK, 9/70-7/71; CONTINUATION; $35,533; NICHD.

A147 THE EFFECT OF ASPHYXIA ON FETAL LUNG FLUID. HD-0405-01A1, JOHNSON, JOHN W. C. JR.; JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND, 5/70-7/71, INITIAL; $13,452; NICHD.

A148 DETECTION AND STUDY OF INBORN ERRORS. HD-3967-07, GUTHRIE, ROBERT, STATE UNIVERSITY OF NEW YORK, BUFFALO, NEW YORK, 4/70-7/71, CONTINUATION; $48,012; NICHD.

A149 EFFECTS OF VIRUSES ON HUMAN CHROMOSOMES. HD-03691-05, RUDOLPH, NATHAN, MONAMIDON MEDICAL CENTER, NEW YORK, NEW YORK, 9/70-7/71; CONTINUATION; $35,533; NICHD.

A150 DEVELOPMENTAL NERVOUS DISORDERS KRABBE'S DISEASE. NS-6756-04, FLETCHER, T. P., UNIVERSITY OF MINNESOTA COLLEGE OF VETERINARY MEDICINE. ST. PAUL, MINNESOTA, 9/70-7/71, RENEWAL $29,688 NINDS.

A151 DEVELOPMENTAL NERVOUS DISORDERS KRABBE'S DISEASE. NS-6756-04, FLETCHER, T. P., UNIVERSITY OF MINNESOTA COLLEGE OF VETERINARY MEDICINE. ST. PAUL, MINNESOTA, 9/70-7/71, RENEWAL $29,688 NINDS.

A152 DEVELOPMENTAL NERVOUS DISORDERS KRABBE'S DISEASE. NS-6756-04, FLETCHER, T. P., UNIVERSITY OF MINNESOTA COLLEGE OF VETERINARY MEDICINE. ST. PAUL, MINNESOTA, 9/70-7/71, RENEWAL $29,688 NINDS.

A153 DEVELOPMENTAL NERVOUS DISORDERS KRABBE'S DISEASE. NS-6756-04, FLETCHER, T. P., UNIVERSITY OF MINNESOTA COLLEGE OF VETERINARY MEDICINE. ST. PAUL, MINNESOTA, 9/70-7/71, RENEWAL $29,688 NINDS.
VARIOUS VIRUSES UPON HUMAN CHROMOSOMES AND TO INVESTIGATE IN DEPTH THE IN VIVO EFFECTS ON HUMAN CHROMOSOMES OF THE CYTOMEGALIC INCLUSION DISEASE VIRUS RECEIVED AS IMPORTANT IN THE EPIDEMIOLOGY OF THE ABOVE PROBLEMS.

A150 EFFECTS OF ANOXIA ON BRAIN METABOLISM IN THE NEWBORN, NS-6163-05, TUHRSTON, JEAN H.; WASHINGTON UNIVERSITY MEDICAL SCHOOL, ST. LOUIS, MO; 1/69-7/70, CONTINUATION, $28,412; NINDS

This research proposes to study biochemical effects of anoxia on the brain of the newborn fetus. Substrates of known importance in brain metabolism will be measured at zero time and after varying degrees of anoxia to correlate the findings with function in the brain as might relate to subsequent development.

A155 EFFECTS OF MALNUTRITION IN EARLY LIFE; (1) HD-02581-06, BARNES, RICHARD H.; CORNELL UNIVERSITY, ITHACA, NEW YORK, (1) 7/69-7/70, (2) 7/70-7/71, CONTINUATION, (1) $911, (2) $411,372; NICH.

This research proposes to study the effects of malnutrition in early life upon subsequent physical and mental development in experimental animals (particularly rats and pigs).

A160 EFFECTS OF MATERNAL HYPOXEMIA ON INFANT DEVELOPMENT, HD-4075-02, WHITMORE, RUTH; VALE UNIVERSITY, NEW HAVEN, CONNECTICUT, 3/70-7/71, CONTINUATION, $23,149; NICH.

The purpose of this research is to study the effect of maternal hypoxemia on growth and development of both the fetus and the offspring. Some of the objectives are: 1) to establish the relationship of chronic maternal hypoxemia to fetal development; gestational age, and birth weight; and 2) to evaluate the subsequent growth and development of such infants.

A165 ENERGY SUPPLY DISORDERS AFFECTING THE FETAL-TISSUE BARRIER AND REDUCES THEIR FUNCTIONAL ABILITY TO EXCRET BILE. THE FLAVIN CONTENT OF THE MITOCHONDRIA. THE RELATIONSHIP OF THIS MODEL REACTION TO HEME CLEAVAGE IN THE PRESENCE OF LIVER EXTRACTS. AND THE RELATIONSHIP OF THIS MODEL REACTION TO HEME CLEAVAGE IN THE PRESENCE OF VARIOUS REDUCING AGENTS. THIS RESEARCH CONCERNS THE MECHANISM OF HEME RING CLEAVAGE IN THE PRESENCE OF LIVER EXTRACTS. AND THE RELATIONSHIP OF THIS MODEL REACTION TO HEME CLEAVAGE IN THE PRESENCE OF LIVER EXTRACTS.

A170 FETAL AND NEONATAL PITUITARY-THYROID FACTORS INFLUENCING EXPERIMENTAL DETOXIFICATION NS-7360-01, LAMBOOY, STANFORD RESEARCH INSTITUTE, MENLO PARK, CALIFORNIA; 4/70-3/71; CONTINUATION, $25,562; NICHD.

This research proposes to synthesize and evaluate potential inhibitors of phenylalanine hydroxylase. So far, the most potent inhibitor with a minimum of side-effects has been esculetin (6,7-dihydropolyoxycoumarin). The ultimate objective is to study brain biochemistry as it relates to mental retardation and neurological pathology.

A175 ENZYMATIC FORMATION OF BILE PIGMENTS, NS-5367-06 LEVIN, EPHRAIM Y., JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE, MARYLAND, 9/69-8/70, CONTINUATION, $47,700; NINDS

This research proposes further exploration of recent experimental findings suggesting that chronic metabolic hypoxidosis ablates the inherent specific skill of the cerebrocortical cortex to function as blood-tissue barrier and reduces their functional ability to that of common capillaries.

A180 ENZYMES ACTIVITIES IN BRAINS, NS-7360-01 LAMBOOY, JOHN P., UNIVERSITY OF NEBRASKA COLLEGE OF MEDICINE, OMAHA, NEBRASKA, 9/69-8/70, CONTINUATION, $50,470; NINDS

This research proposes to study the relationship between the half-life of the mitochondria of the brain and the flavin content of the mitochondria. The flavin content will be expressed as the succinic dehydrogenase activity of the brains of infant rats whose biochemically functional flavin will depend on the composition of the flavin component of their diet.

A185 ERTHROCYTE METABOLISM IN THE PREMATURE INFANT, HD-01919-05, OSKI, FRANK A.; UNIVERSITY OF PENNSYLVANIA, PENNSYLVANIA; 6/70-6/71, CONTINUATION, $22,614; NICH.

There are observations which indicate that the red cells of the premature infant demonstrate the following: ATP and 2,3-diphosphoglycerate instability, inadequate glucose consumption for mean cell age, a normally functioning pentose phosphate pathway, decreased cation transport, markedly increased levels of glucose-6-phosphate and fructose-6-phosphate, consistently decreased phosphofructokinase activity, increased enolase activity, and a predominance of a fetal form of red cell hexokinase.

A188 EXPERIMENTAL PKU INDUCED BY ENZYME INHIBITORS; HD-01972-03, CHOCZ, JOHN; YALE UNIVERSITY, NEW HAVEN, CONNECTICUT, 4/70-3/71; CONTINUATION; $14,651; NINDS

This research proposes to investigate the mechanisms which cause mental retardation in accumulation diseases.

A189 EXPERIMENTAL MODEL OF PHENYLKETONURIA-LIKE CONDITIONS; NS-6695-03, AND-0311, LEVY, JEROLD F.; OHIO STATE UNIVERSITY, COLUMBUS, OHIO, 9/69-3/70, CONTINUATION, $21,652; NINDS

This research proposes to investigate the mechanisms which cause mental retardation in accumulation diseases.

A190 FACTORS INFLUENCING NEURAL TUBE DIFFERENTIATION NS-6367-05, LEVY, L., CUNN, I.; CITY UNIVERSITY OF NEW YORK, NY., 1/70-12/70, INITIAL, $2,639; NINDS

Research on the effects of phototherapy on neurological symptoms, CNS lesions and cerebral uptake of labelled bilirubin in guinin rats.

A195 FRACTIONATION PROTEIN MACROMOLECULES, NS-2023-07, BRUNINGRABER, ERIC G.; ILLINOIS STATE PSYCHIATRIC INST. CHICAGO, ILL., 1/70-12/70, CONTINUATION, $1,376; NINDS

Fractionation and isolation of brain glycoproteins to determine their role in the CNS with the difference in various pathological lesions (Alzheimer's disease) being studied.

A196 REDUCING AGENTS HAVING A POTENTIAL INHIBITORS OF PHENYLALANINE HYDROXYLASE. SO FAR, THE MOST POTENT INHIBITOR WITH A MINIMUM OF SIDE-EFFECTS HAS BEEN ESCULETIN (6,7-DIHYDROPOLYOXOYCOUMARIN). THE ULTIMATE OBJECTIVE IS TO STUDY BRAIN BIOCHEMISTRY AS IT RELATES TO MENTAL RETARDATION AND NEUROLOGICAL PATHOLOGY.

A197 FACTORS INFLUENCING EXPERIMENTAL KERNICLTERUS NS-02015-05, LUCY, JEROLD F.; UNIVERSITY OF VERMONT, BURLINGTON, VERMONT; 2/70-6/71, CONTINUATION, $25,562; NHEBD.

This research proposes to develop techniques that might increase the resistance of human infants to hyperbilirubinemia by a study of comparative susceptibility to kernicterus of a few new born animal species: Asphyxia, Acidosis, Hypoglycemia, Hypocalcemia and respiratory distress will be considered.

A198 FETAL AND NEONATAL DETOXIFICATION MECHANISMS; HD-02800-04, BROWN, AUDREY K.; MEDICAL COLLEGE OF GEORGIA, AUGUSTA, GEORGIA; 10/69-9/70, CONTINUATION, $23,944; NICHD.

This research proposes to investigate factors influencing excretion of bilirubin and to study the functions of excretion of bilirubin and the rate of bile flow in newborn infants. Bilirubin will be assessed for bilirubin C-14 and BSP-35 which will be infused through the femoral vein.

A199 FETAL AND NEONATAL PITUITARY-THYROID PHYSIOLOGY; HD-02200-03, SCHINDLER, WILLIAM J.; BAYLOR UNIVERSITY, HOUSTON, TEXAS, 9/69-9/70; CONTINUATION, $12,270; NICHD.

This study will investigate the effects of thyroxin level during fetal and neonatal periods on biochemi- cal, behavioral, and physiological development.
A195 FUNCTIONAL ANALYSIS OF THE HUMAN SKULL. NS-965-15, MOSSL, MELVIN L., COLUMBIA UNIVERSITY COLLEGE OF PHYSICIANES AND SURGEONS, NEW YORK, N.Y. 470-371, CONTINUATION $8,638. NINDS

This research proposes to continue study of the form and structure of the human skull by the previously established methods of functional cranial analysis, the isolation of functional cranial components, the identification of the postnatal changes in skeletal units and related functional matrices.

A196 FRACTIONATION AND QUANTITATION OF THE HUMAN GENE. HD-04569-01, SCHMICKEL, ROY D., UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN 1169-1070, INITIAL $39,577, NICHD

This study is concerned with the isolation, fractionation, and quantitation of human genetic material for the investigation of the molecular basis of human teratology. Methods will be developed to purify and fractionate DNA for the enrichment of specific genes. In order to make the quantitation of these genes possible, correlations will be made between normals and individuals with chromosomal abnormalities. A basis will be provided for understanding chromosomal diseases in terms of specific gene alteration and control.

A197 FUNCTIONAL ASPECTS OF PULMONARY IMMATURE; HD-0244-04, AULD, PETER A.M., CORNELL UNIVERSITY, NEW YORK, NEW YORK 6/70-5/71, RENEWAL $32,675, NICHD

This research proposes to define in physiologic terms the limits of pulmonary function in the small premature infant. Application of knowledge to the clinical problem of respiratory insufficiency will suggest new therapeutic maneuvers anticipated to improve mortality and reduce physical and mental morbidity in this high-risk group.

A200 FURTHER INVESTIGATION ON INFANT MALNUTRITION. HD-0374-09, MONTEBEGG, FERNANDO B., UNIVERSITY OF CHILE, SANTIAGO, CHILE 1170-1270, CONTINUATION $25,250, NICHD

This project is concerned with the pathophysic mechanisms of metabolic disorders which result from malnutrition. Both protein and calorie, acquired during the first months of life. These disorders are thought to interfere very severely with growth, development, and intellectual capacity.

A225 HEMOSTASIS AND HEMORRHAGIC DISEASE IN CHILDREN. HD-00566-01, SCHULMAN, IRVING, UNIVERSITY OF ILLINOIS, CHICAGO, ILLINOIS 1/70-12/70, RENEWAL $61,233, NICHD

The research objectives of this project are (1) to study the intrauterine and postnatal changes in the blood coagulation mechanism in primate fetuses with particular reference to the effects of asphyxia; (2) to study postnatal changes in the coagulation mechanism in human low birth-weight infants with particular reference to the mechanism of the respiratory distress syndrome; (3) to study the phenomenon of platelet aggregation in newborns with reference to the phenomenon of acidosis, in infants with iron deficiency anemia and in children with recurrent epistaxis; and (4) to study the interrelationships among bacteremia, shock, and intravascular clotting.

A226 HERITABILITY OF I.Q. AND ACHIEVEMENT IN FOUR POPULATIONS. HD-04751-01, SCARR, SANDRA W., UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PENNSYLVANIA 6/70-5/71, INITIAL $114,122, NICHD

This is a one year project which is to be based on Philadelphia public school records. This data will be used to estimate heritabilities for general intelligence, special abilities, and scholastic achievement in four populations (middle and lower class Negro and white children) from kindergarten through 12th grade. The plan is to use the mongoloid twin differences as the basic factor to estimate heritabilities. Three different methods of estimating heritabilities will be used: Holzinger’s multitrait multipli­cation model and the generalized model.

A227 HISTOCHEMICAL SURVEY OF ENZYMES IN BEHAVIORAL MUTANTS. HD-0093-14, TASSONI, JOSEPH P., NEW JERSEY COLLEGE OF MEDICINE AND DENTISTRY, JERSEY CITY, NEW JERSEY 1/70-12/70, CONTINUATION $29,236, NICHD

The purpose of this project is to study enzyme aberrations in the central nervous system of murine behavioral mutants. The principle animals being used are the wheelchair lethal (wld+wld), dystonia musculorum (dt/dt), and jimpy (jim). These animals exhibit neuromuscular abnormalities which simulate certain human disorders. Enzyme systems are being related to normal and abnormal cellular activities and to mechanisms involved in normal and abnormal gene actions.

A228 HYPOXEMIA, ACIDEA AND CAPILLARY PERMEABILITY. HD-02704-04, TAYLOR, PAUL MITCHELL, MAEGER-WOMEN’S HOSPITAL, PITTSBURGH, PENNSYLVANIA 6/70-12/70, CONTINUATION $23,812, NICHD

This research proposes to determine the relative susceptibilities of the pulmonary capillaries of adult and 2-week-old dogs to hypoxemia, acidemia and hypoxemia plus acidemia. A background for the study of methods of preventing or hastening recovery from increases in pulmonary capillary permeability caused by acute metabolic insults is being anticipated.

A229 HYPOXIA, METABOLISM, AND NEONATAL THERMOREGULATION. HD-02531-04, BAUM, DAVID, UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON 10/69-9/70, RENEWAL $13,763, NICHD

This research proposes to elicit the biochemical effects of acute and chronic hypoxia on thermogenesis in the human infant, and to extrapolate the findings for use in the medical care of the hypoxic infant.

A230 INBORN ERRORS OF METABOLISM. HD-04526-01, DANCIS, JOSEPH, NEW YORK UNIVERSITY, NEW YORK, NEW YORK 1069-970, INITIAL $17,161, NICHD

The specific aim of this study of metabolic errors is an attempt to identify enzymatic defects in order to aid in diagnosis and treatment. The project will be performed on individuals with familial hyperlipemia, X-linked hyperuricosuria, and maple syrup urine disease. The enzymes thus obtained for biochemical studies of enzyme activity, determinations of the pathway of lysine degradation and various means for diagnosing hyperlipemia and glycogen storage disease will be made.

A231 INTELLECTUAL STIMULATION OF CULTIVALLY DEPRIVED INFANTS. MH-9224-05, FURFEY, PAUL H., UNIVERSITY OF CHICAGO, CHICAGO, ILLINOIS 1/70-12/70, RENEWAL $52,900, NICHD

The major objective of this research is the continuation of a study of glial and myelin lipids in the developing and mature brain. Multiple sclerosis will be developed to examine the preparation of subcellular particles from glial cells in order to study localization of glial plasma membranes, nucleoli, and mitochondria and to study a chain elongation system for the synthesis of a long chain of fatty acids in glial cells. The activity of the chain elongation system will be examined at different periods of brain development.
A271 MATERNAL BEHAVIOR AND INFANT DEVELOPMENT IN A270 MATERNAL AND FETAL METABOLISM OF STEROIDS INTRAUTERINE ENVIRONMENTS INJURIOUS TO A251 INTERMEDIARY METABOLISM IN THE PREMATURE GATION. AND EXCRETION OF BILIRUBIN IS TO BE STUDIED. TAL MAMMALS, BUT DEVELOPS AFTER BIRTH. THE PARTICULAR THAT THIS MATERIAL IS NOT PRESENT IN FETUSES OF PLACEN­ TATOR-CARRIER SYSTEM FOR BILIRUBIN WHICH WOULD ACCOUNT THIS PROJECT IS A SEARCH FOR AN INTRACELLULAR RECEP­ THE AIM OF THIS PROJECT IS TO INVESTIGATE MATERNAL MEANS. THE DEGREE OF HYPERBILIRUBINEMIA IN THE BEIN CONDUCTED TO TRAP BILIRUBIN WITHIN THE INTESTINAL IN RATS. FINALLY, SINCE ENTEROHEPATIC RECIRCULATION OF ROLOGICAL AND INTELLECTUAL HANDICAPS IN NEWBORNS AND LONG TERM FOLLOW-UP STUDIES ON PHYSICAL, NEU­ METABOLISM IN FETUS AFFECTED WITH ERYTHROBLASTOSIS, ACID METABOLISM, AMINO ACID METABOLISM, BILIRUBIN EMPHASIS ON GLUCOSE UTILIZATION, INDIVIDUAL FREE FATTY METABOLISM IN WELL AND SICK NEWBORN INFANTS WITH RY METABOLISM IN PRENATAL LIFE; HD-02397-04, EASTERDAY, BERNARD TION. (2) THE TARGET CELLS. (3) HOW SUCH CELLS ARE AL­ MECHANISM OF THE DEGRADATION OF SPHINGOSINE BASES TO RESEARCH ON MECHANISM OF ACTION OF CERAMIDASE. HIPPOCAMPUS, MENLO PARK, CALIFORNIA; NS-8447-01 FORMERLY NS-5062, BESSMAN, SAMUEL P., UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES, CALIF., 9/68-4/70, RENEWAL, $31,153; NINDS. THIS RESEARCH CONCERNS THE METABOLISM OF GAMMA-HYDROXYBUTYRATE TO ITS LACTONE. THIS RESEARCH CONCERNS THE METABOLISM OF GAMMA-HYDROXYBUTYRATE IN ANIMALS AND IN METABOLISM IN GUINEA PIGS CONSISTING OF PHENYLALANINE LOADING TESTS ADMINISTERED AT VARIOUS AGES BEGINNING AT BIRTH, FOLLOWED BY ASSAY OF PHENYLALANINE HYDROX­ VYLANE ACTIVITY IN PLASMA OF PATIENTS WITH HURLER'S SYNDROME USING URINE FOR SEPARATION AND IDENTIFICATION OF THE MUCOPOLYSACCHARIDES AND SKIN FIBROBLASTS GROWN IN TISSUE CULTURE. A270 MATERNAL AND FETAL METABOLISM OF STEROIDS AND DRUGS, 5/70-4/71, HUDSON, ROBERT, HOSPITAL RESEARCH FOUNDATION, CINCINNATI, OHIO, 6/70-5/71, RENEWAL, $100,341; NICHD. THIS RESEARCH INVOLVES STUDIES OF CHILDREN WITH HYPER­ GLOCYCINURIA USING DECREASED CON­ VERSION OF GLYCINE TO CO2. STUDIES OF PHENYLALANINE METABOLISM IN GUINEA PIGS CONSISTING OF PHENYLALANINE LOADING TESTS ADMINISTERED AT VARIOUS AGES BEGINNING AT BIRTH, FOLLOWED BY ASSAY OF PHENYLALANINE HYDROXY­ VYLANE ACTIVITY IN PLASMA OF PATIENTS WITH HURLER'S SYNDROME USING URINE FOR SEPARATION AND IDENTIFICATION OF THE MUCOPOLYSACCHARIDES AND SKIN FIBROBLASTS GROWN IN TISSUE CULTURE. A271 MATERNAL BEHAVIOR AND INFANT DEVELOPMENT IN MONKEYS, HD-04005-01; KAPLAN, JOEL N.; STANFORD RESEARCH INSTITUTE, MENLO PARK, CALIFORNIA; 5/70-4/71, INITIAL, $41,205; NICHD. THE AIM OF THIS PROJECT IS TO INVESTIGATE MATERNAL BEHAVIOR AND INFANT DEVELOPMENT ON THE ROLE OF THE MOTHERS' ATTITUDES TOWARDS THE INFANT SPECIFICALLY, THE FOLLOWING WILL BE EXAMINED: (1) THE EFFECTS OF DIFFERENT MOTHERLY ATTITUDES AND SOCIAL BEHAVIOR ON THE EMBRYO; (2) THE SEPARATION AND REUNION OF MOTHERS AND INFANTS AT DIFFERENT POSTNATAL STAGES, (3) THE EFFECT OF INFANT LOSS AT DIFFERENT POSTNATAL STAGES ON PARENTAL BEHAVIOR, (4) PARKER SOCIAL BEHAVIOR OF INFANTS SEPARATED FROM THEIR MOTHERS AT DIFFERENT AGES, AND (5) THE EFFECT OF COMPLETE SOCIAL DEPRIVATION FOR THE FIRST THREE AND SIX MONTHS OF LIFE ON EARLY BEHAVIOR PATTERNS. A272 MATURATION OF LIVER FOR THE METABOLISM OF BILIRUBIN, HD-02268-05; ODELL, GERARD B.; JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND; 5/70-4/71, CONTINUATION, $22,395; NICHD. THIS PROJECT IS A SEARCH FOR AN INTRACELLULAR RECEPTOR SYSTEM FOR BILIRUBIN WHICH WOULD ACCOUNT FOR THE ABILITY OF THE HEPATOCYTES TO TAKE UP AND CONCENTRATE BILIRUBIN FROM EXTRACELLULAR FLUID WHERE BILIRUBIN IS TIGHTLY BOUND TO ALBUMIN: IT IS BELIEVED THAT THIS MATERIAL IS NOT PRESENT IN FETUSES OF PLACEN­ TAL MAMMALS, BUT DEVELOPS AFTER BIRTH. THE PARTICULAR ROLE OF THIS MATERIAL IN MEDIATING THE UPTAKE, CONJU­ GATION, AND EXCRETION OF BILIRUBIN IS TO BE STUDIED. SIMULTANEOUS STUDIES OF THE PROLONGED EFFECTS OF HYPER-BILIRUBINEMIA ON KIDNEY FUNCTION ARE BEING DONE IN RATS, FINALLY THE IMPACT ON HEPATIC REGENERATION OF PREVIOUSLY EXCRETED BILIRUBIN CAN OCCUR, STUDIES ARE BEING CONDUCTED TO TRAP BILIRUBIN WITHIN THE INTESTINAL TRACT AND THEREBY INHIBIT ITS EXCRETION. BY THESE MEANS, THE DEGREE OF HYPER-BILIRUBINEMIA IN THE NEONATAL PERIOD MAY BE REDUCED.

RESEARCH WITH TISSUE CULTURE CELL STRAINS TO DEFINE THE BIOCHEMICAL DISEASE IN METACHROMATIC LEUKODYSTROPHY (MLD) AND ITS RELATION TO NEUROLOGICAL DEFICIT. BIOCHEMICAL CHARACTERIZATION IS PREREQUISITE FOR IMPROVED AND EARLY DIAGNOSIS, GENETIC COUNSELING, AND THERAPEUTICS.

A310 NATURE AND MECHANISMS OF CONGENITAL INFECTIONS, HD-01687-05, ALFORD, CHARLES A., UNIVERSITY OF ALABAMA, BIRMINGHAM, ALABAMA 9/69-5/70, CONTINUATION, $32,103, NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE VIRAL-HOST RELATIONS IN CONGENITAL INFECTIONS THAT RESULT IN THE DISRUPTION OF EMBRYOGENESIS IN MAN WITH SPECIAL REFERENCE TO RUBELLA AND CYTOMEGALOVIRUS.

A319 NEUROGENETIC PROCESSES IN FETAL BRAIN, RS-9081-01, RACK, ALLEN R., BOSTON, MASSACHUSETTS, 6/70-8/71, INITIAL, $59,191, NINDS

RESEARCH ON THE BEHAVIOR OF NERVE CELLS AS THEY PROLIFERATE, MIGRATE, INTERACT, AND MATURE IN THE BRAINS OF FETAL HUMANS AND MONKEYS TO UNDERSTAND DEVELOPMENTAL DISEASES OF THE BRAIN, PARTICULARLY THOSE CAUSING MENTAL RETARDATION.

A320 NEURODEVELOPMENT INFANTS OF DIABETIC MOTHERS, HD-01813-09, HUBBELL, JOHN P., JR., BOSTON HOSPITAL FOR WOMEN, BOSTON, MASS. 6/70-5/71, CONTINUATION, $5,534, NICHD

THIS RESEARCH INVOLVES THE COLLECTION OF DATA DURING PREGNANCY, LABOR AND DELIVERY OF PREGNANT WOMEN WITH DIABETES. THE INFANTS AFTER BIRTH ARE EXAMINED AND FOLLOWED IN ACCORDANCE WITH THE PROTOCOL OF THE COLLABORATIVE NEONATAL STUDY OF RUBELOIDS, THE ULTIMATE AIM IS TO DETERMINE THE LONG-RANGE NEUROLOGIC OUTCOME IN SIBS LIVE-BORN INFANTS AND TO TRY TO CORRELATE THIS WITH ANATOMIC AND BIOCHEMICAL OBSERVATIONS.

A321 NEUROPATHOLOGICAL ASPECTS OF MENTAL RETARDATION, HD-04593-01, ALFORD, ELLSWORTH C., JR., UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON. 6/70-5/71, INITIAL, $49,374, NICHD

THE SPECIFIC AIM OF THIS RESEARCH IS TO UNDERSTAND SOME OF THE ETIOLOGIC AND PATHOGENIC ASPECTS OF MENTAL RETARDATION IN COMPARISON WITH THE NORMAL DEVELOPMENT OF THE NERVOUS SYSTEM. THREE SEPARATE STUDIES WILL BE Undertaken: AN ATTEMPT TO UNCOVER HISTIOLOGIC LESIONS IN PREMATURE INFANT BRAINS HEREFORE UNDETECTABLE BY PATHOLOGICAL STUDY OF CEREBRAL PALSY, EPILEPTIC, AND MENTALLY RETARDED CHILDREN; AND AN ANALYSIS OF THE REACTIVITY OF THE IMMATURE BRAIN.

A325 NEW AMINO ACID DISORDERS IN CEREBRAL DISEASE, NS-5076-07, SHIH, VIVIAN E., MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASS. 9/69-8/70 RENEWAL $59,375, NINDS

THIS RESEARCH INVOLVES THE INVESTIGATION OF ENZYME BIOCHEMICAL DEFECTS IN SEVERAL PREVIOUSLY UNDESCRIBED INHERITED ERRORS OF AMINO ACID METABOLISM ASSOCIATED WITH AMMONIA INTOXICATION, MENTAL RETARDATION, AND OTHER EVIDENCE OF CEREBRAL DISEASE.

A330 NUTRITION AND CELL GROWTH DURING BRAIN DEVELOPMENT, HD-386-02, WINK, MYRON; CORNELL UNIVERSITY, NEW YORK, NEW YORK, 3/70-2/71, CONTINUATION, $35,300, NICHD

THE EFFECTS OF MALNUTRITION ON CELLULAR CHANGES IN THE DEVELOPING BRAIN ARE BEING INVESTIGATED USING BIOCHEMICAL TECHNIQUES. ONCE THESE CHANGES ARE DEFINED, IT MAY BE POSSIBLE TO DETERMINE IF ANY OR ALL ARE REVERSIBLE.

A331 NUTRITION, CELL FUNCTION, AND GROWTH INFECTION AND DEVELOPMENT, NS-9081-01, METCOFF, J. R.; UNIVERSITY OF OKLAHOMA; OKLAHOMA CITY, OKLAHOMA, 6/70-5/71, CONTINUATION, $38,328, NICHD

THIS INVESTIGATION PROPOSES TO STUDY OXYGEN CONSUMPTION AND THE CONCENTRATION OF THE VARIOUS REBES CYCLE ENZYMES IN THE LEUKOCYTES OF INFANTS WITH FETAL MALNUTRITION AND TO CONTRAST THESE VALUES WITH THOSE FOUND IN SEVERE PROTEIN-CalORIE MALNUTRITION. SIMILAR MEASUREMENTS WILL BE MADE ON PLACENTAL TISSUE OBTAINED FROM PREGNANCIES CHARACTERIZED BY PRODUCTION OF AN UNDERGROWN INFANT. WHEN POSSIBLE, AND WHEN THE INFANT LIVES, SERIAL LONG-TERM MEASUREMENTS IN THE LEUKOCYTES WILL BE CARRIED OUT FOR SEVERAL YEARS.

A333 NUTRITION AND DEVELOPMENT OF CHILDREN IN RURAL AREAS, HD-03942-03, CHAVEZ, ADOLFO; INSTITUTO NACIONAL DE LA NUTRICION, MEXICO, D.F., MEXICO, 5/70-4/71, CONTINUATION, $22,045, NICHD

THIS RESEARCH WILL MEASURE, LONGITUDINALLY, FOOD AND NUTRIENT CONSUMPTION IN CHILDREN FROM BIRTH TO 3 YEARS OF AGE. THIS DATA WILL BE CORRELATED WITH GROWTH, MATURATION AND HEALTH. QUANTITATIVE FEEDING PRACTICES FOR INFANTS AT VARIOUS AGES WILL BE DEFINED.

A340 NUTRITION, CELL FUNCTION AND GROWTH RETARDATION, HD-02912-02, METCOFF, J. R.; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CALIFORNIA 9/69-12/70 CONTINUATION $33,684, NICHD

THE MAIN OBJECTIVE OF THIS RESEARCH IS TO RELATE MOTIVATION AND LEARNING TO GENERAL AND CELLULAR PHYSIOLOGY BY MEANS OF MANIPULATION OF NUTRITIONAL VARIABLES. THE EXPERIMENTAL SUBJECTS ARE RATS AND CHICKS. THE RELATIONS BETWEEN DEFICIENT AND SURPLUS DIETS, ACTIVITY, PREFERENCE, LEARNING, AND THE CAPACITY TO LEARN. ORGAN PARAMETERS, AND LEVELS OF NUCLEIC AND FREE AMINO ACIDS WILL BE INVESTIGATED.

A345 NUTRITION IN PREGNANCY AND EARLY CHILDHOOD, HD-30924-02, LINZ, WALTER; TULANE UNIVERSITY, NEW ORLEANS, LOUISIANA, 6/70-5/71, CONTINUATION, $33,687, NICHD

THE OBJECTIVES OF THIS RESEARCH ARE TO PROVIDE DIETARY INTAKE DATA FROM PREGNANT WOMEN IN A RURAL AREA OF SOUTHEASTERN LOUISIANA AND INFANTS FROM BIRTH THROUGH THE AGE OF FIVE YEARS. THIS INFORMATION IS TO BE CORRELATED WITH CLINICAL DATA PERTAINING TO GESTATION, DELIVERY, GROWTH, PHYSICAL AND MENTAL DEVELOPMENT OF THE OFFSPRING, AND WITH CLINICAL AND BIOCHEMICAL PARAMETERS OF NUTRITIONAL STATUS.

A346 NUTRITIONAL AND BIOCHEMICAL BASIS FOR LEARNING, HD-03729-06, COLLIER, GEORGE H.; THE STATE UNIVERSITY OF RTUGERS, NEW BRUNSWICK, NEW JERSEY 9/69-8/70, CONTINUATION, $33,684, NICHD

THIS RESEARCH CONCERN THE DEVELOPMENT OF NEURONAL FUNCTIONING WITH ANATOMICAL DEVELOPMENT OF CORTEX, AND WITH BIOCHEMICAL CHANGES OBSERVED DURING MATURATION OF THE BRAIN.

A350 ONTOGENESIS OF ACTIVITY IN CEREBRAL NEURONS, NS-7103-04, HUTTENLOCHER, PATRIC; YALE UNIVERSITY SCHOOL OF MEDICINE, NEW HAVEN, CONNECTICUT, 9/69-12/70, CONTINUATION, $14,168, NINDS

THIS RESEARCH CONCERNS THE DEVELOPMENT OF NEURONAL ACTIVITY IN IMMATURE MAMMALIAN CEREBRAL CORTEX. IT IS HOPED TO EVENTUALLY CORRELATE DEVELOPMENT OF NEURONAL FUNCTIONING WITH ANATOMICAL DEVELOPMENT OF CORTEX, AND WITH BIOCHEMICAL CHANGES OBSERVED DURING MATURATION OF THE BRAIN.

A355 PATHOGENESIS AND MECHANICS OF PULMONARY HYPOPLASIA, HD-3639-02, DE LORMIER, ALFRED A.; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CALIF. 11/69-10/70, CONTINUATION, $36,136, NICHD

THE PURPOSE OF THIS PROJECT IS TO EXAMINE THE FOLLOWING TOPICS: 1) THE PATHOGENESIS OF HYPOPLASTIC LUNGS; 2) THE VENTILATORY AND HEMODYNAMIC CHANGES THAT OCCUR IN LAMBS WITH HYPOPLASTIC LUNGS;' 3) METHODS OF VENTILATING THE HYPOPLASTIC LUNGS WHICH WILL PROVIDE ADEQUATE GASEOUS EXCHANGE.

A356 PATHOGENESIS OF CENTRAL NERVOUS SYSTEM MALFORMATIONS, HD-01503-08, CHAMBERLAIN, T. J.; UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CALIFORNIA 6/70-5/71, CONTINUATION, $32,292, NICHD

THIS RESEARCH PROPOSE TO STUDY THE DEVELOPMENT OF ABNORMALITIES SUCH AS HYPOCEPHALUS CAUSED BY ACUTE OR CHRONIC NIACIN DEFICIENCY IN PREGNANT RATS AND THE EFFECTS OF NIACIN DEFICIENCY INSTILLED EARLY IN GESTATION. THESE STUDIES WILL BE COMPARED AND CONTRASTED.
WITH OTHER DENTAL DEFICIENCIES KNOWN TO BE TERATOGENIC IN MAMMALS.

A360 PATHOGENESIS OF NEONATAL PHYSIOLOGIC MALNUTRITION, THOMAS J. JAUNDE, HD-3782-02, GARTNER, LAURENCE M., MICHELL, YOSHINAKA, NEW YORK, N.Y., 11/69-12/70, RENEWAL, $27,607. NCHD
THIS PROJECT INCLUDES THE FOLLOWING STUDIES: 1) EVALUATION OF HEPATIC BILIRUBIN TRANSPORT AND METABOLISM IN THE SUBHUMAN PRIMATE IN VIVO; 2) IDENTIFICATION OF INHIBITORS OF GLUCURONYL TRANSFERASE IN LIVER OF NEW, BORN SUBHUMAN PRIMATES, GUINEA PIGS, AND HUMANS; AND 3) EVALUATION OF THE RELATIONSHIP BETWEEN THE CENTRAL AND PERIPHERAL BINDING OF PROTEINS, IN SERUM AND HEPATIC CYTOPLASMIC FRACTIONS, IN RELATION TO TRANSFER OF BILIRUBIN FROM PLASMA TO LIVER.

THE PURPOSE OF THIS PROJECT IS TO SEPARATE THE CONSEQUENCES OF DIETARY RESTRICTION DURING GESTATION FROM THOSE OF RESTRICTION DURING LACTATION IN ORDER TO EVALUATE THEIR RELATIVE IMPORTANCE IN THE CONTROL OF THE DEVELOPMENTAL STRESSORS APPLIED AT THE TWO DIFFERENT PERIODS.

A370 PERSISTENT CONGENITAL AND NEONATAL VIRUS INFECTIONS, HD-4134-01, LANG, DAVID I., DUKES UNIVERSITY, DURHAM, NORTH CAROLINA, 8/69-7/70, CONTINUATION, $7,542. NCHD
THE PURPOSE OF THIS PROJECT IS TO STUDY CONGENITAL AND NEONATAL VIRUS INFECTIONS, EMERGING THOSE AGENTS WHICH CAUSE PERSISTENT INFECTION. PRESENT STUDIES FOCUS ON THE EPIDEMIOLOGIC AND BEHAVIORAL PERFORMANCE OF THE PROGENY. THE STUDIES WILL EXPLORE QUANTITATIVE AS WELL AS QUALITATIVE DIFFERENCES RESULTING FROM THE STRESSES APPLIED AT THE TWO DIFFERENT PERIODS.

A375 PHENYLALANINE ANTIMETABOLITE EFFECT ON NEURONAL SYSTEM, NS-6903-03, WATT, DEAN D., MIDWEST RESEARCH INSTITUTE, KANSAS CITY, MO., 2/69-1/70, RENEWAL, $23,730. NINDS
THIS RESEARCH REPORTS A STUDY OF THE EFFECTS OF ANTIMETABOLITES OF PHENYLALANINE UPON THE NERVOUS SYSTEM, WITH EMPHASIS UPON THE DEVELOPMENTAL AND BEHAVIORAL PERFORMANCE OF HUMAN CYTMEGALOVIRUS IN VITRO AND IN VIVO.

THE PURPOSE OF THIS STUDY IS TO OBTAIN SERIAL MEASUREMENTS OF THE EFFECTS OF PHENYLALANINE ON THE DEVELOPMENT OF THE NERVOUS SYSTEM WITH A VIEW TO RELATING SPECIFIC AND ASSOCIATED ANOMALIES AS A SYNDROMIC CONDITION TO THE BIOLOGICAL CHARACTERISTICS AND ACTIVITIES OF HUMAN CYTMEGALOVIRUS IN VITRO AND IN VIVO.

A385 PHYSIOLOGIC STUDIES IN NEONATALLY MUSCLE-IENCED HUMAN INFANTS, HD-3817-04, OLIVER, HARRISON W., BRYANT, K. JR., UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON, 12/69-11/70, CONTINUATION, $20,303. NCHD
THIS RESEARCH PERTAINS TO THE STUDY OF NEURONS OF THE CEREBRAL CORTEX (STAINED BY THE GOLGI TECHNIQUE) IN A SERIES OF MUSCLE IANCED HUMAN INFANTS WITH DIFFERENT TUPAIAN AND OPOSSUM FROM THESE OBSERVATIONS THE PHENOTYPE OF THESE CELLS WILL BE CONSTRUCTED. THE COMPARATIVE MORPHOLOGY OF THE CORTICOROBAL AND CORTEXOSPINAL FIBERS AND VISUAL PATHWAYS TO THE CORTEX ARE BEING STUDIED IN TUPAIAS GLUS AND SOME LOWER PRIMATES.

A390 PSYCHOSOCIAL DEVELOPMENT IN PRIMATES, HD-3915-03, MASON, WILLIAM A., TULANE UNIVERSITY, NEW ORLEANS, LOUISIANA, 9/69-8/70, CONTINUATION, $29,935. NINDS
IN THIS RESEARCH, DEVICES WILL BE USED TO SIMULATE SELECTED PROPERTIES OF REAL SOCIAL OBJECTS IN AN EFFORT TO CLARIFY THE RELATIONS BETWEEN CONGENITAL PATTERNS OF BEHAVIOR, SPECIFIC FEATURES OF THE SOCIAL ENVIRONMENT, AND THE EFFECTS OF DIFFERENT KINDS AND MAMMALS OF SOCIAL STIMULATION ON SOCIAL AND EMOTIONAL DEVELOPMENT.

THE PURPOSE OF THIS RESEARCH IS TO STUDY THE INCIDENCE OF THE MECHANISMS, DAMAGE OF WHICH RESULTS IN ABNORMAL MOVEMENTS SUCH AS TRENORS OR CHOREOATHETOSIS AND WITH CHANGES IN MOTOR INNERVATION LEADING TO RESTRICTIONS OF JOINT ACTION.

A400 PRE-NATAL AND POST-NATAL MONOAMINES IN BRAIN AND HEARTS, HD-N7124-03, LICATA, RICHARD H., DESERT RESEARCH INSTITUTE, UNIVERSITY OF NEVADA, RENO, NEVADA, 2/69-12/70, CONTINUATION, $4,606. NINDS
THE RESEARCH CONCERNS CAUSAL MECHANISMS AS A BASIS FOR SPECIFIC AND NON-SPECIFIC DEFECTS OF THE CENTRAL NERVOUS SYSTEM. THIS STUDY IS ORIENTED TOWARD A TOTAL BODY APPROACH WITH A VIEW TO RELATING SPECIFIC AND ASSOCIATED ANOMALIES AS A SYNDROMIC CONDITION TO THE BIOLOGICAL CHARACTERISTICS AND ACTIVITIES OF HUMAN CYTMEGALOVIRUS IN VITRO AND IN VIVO.

THE PURPOSE OF THIS RESEARCH IS TO STUDY THE INCIDENCE OF THE MECHANISMS, DAMAGE OF WHICH RESULTS IN ABNORMAL MOVEMENTS SUCH AS TRENORS OR CHOREOATHETOSIS AND WITH CHANGES IN MOTOR INNERVATION LEADING TO RESTRICTIONS OF JOINT ACTION.

A410 PSYCHOSOCIAL DEVELOPMENT IN PRIMATES, HD-3915-02, MASON, WILLIAM A., TULANE UNIVERSITY, NEW ORLEANS, LOUISIANA, 9/69-8/70, CONTINUATION, $29,935. NINDS
IN THIS RESEARCH, DEVICES WILL BE USED TO SIMULATE SELECTED PROPERTIES OF REAL SOCIAL OBJECTS IN AN EFFORT TO CLARIFY THE RELATIONS BETWEEN CONGENITAL PATTERNS OF BEHAVIOR, SPECIFIC FEATURES OF THE SOCIAL ENVIRONMENT, AND THE EFFECTS OF DIFFERENT KINDS AND MAMMALS OF SOCIAL STIMULATION ON SOCIAL AND EMOTIONAL DEVELOPMENT.

A415 PULMONARY CAPILLARY FLOW IN INFANTS, HD-4067-02, BRADY, JUNE P., UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CALIF., 2/70-1/71, CONTINUATION, $43,185. NINDS
THE PURPOSE OF THIS STUDY IS TO OBTAIN SERIAL MEASUREMENTS OF PULMONARY CAPILLARY FLOW IN NORMAL AND SICK INFANTS. THE CHANGES IN PULMONARY CAPILLARY FLOW THAT OCCUR IN NORMAL INFANTS DURING THE FIRST TWO WEEKS OF LIFE WILL BE DETERMINED. IN INFANTS WITH RESPIRATORY DISTRESS THE QUESTION OF WHETHER REDUCTION IN PULMONARY CAPILLARY FLOW OCCURS EARLY OR LATE WILL BE ALSO INVESTIGATED. METHODS WILL BE DEVELOPED FOR EVALUATING THE EFFECTS OF THERAPY.

A420 DEVELOPMENT OF THE NERVOUS SYSTEM, NS-3861-08, HICKS, SAMUEL P., UNIVERSITY OF MICHIGAN MEDICAL CENTER, ANN ARBOR, MICHIGAN, 9/69-8/70, RENEWAL, $32,393. NINDS
THE PURPOSE OF THIS STUDY IS TO OBTAIN SERIAL MEASUREMENTS OF PULMONARY CAPILLARY FLOW IN NORMAL AND SICK INFANTS. THE CHANGES IN PULMONARY CAPILLARY FLOW THAT OCCUR IN NORMAL INFANTS DURING THE FIRST TWO WEEKS OF LIFE WILL BE DETERMINED. IN INFANTS WITH RESPIRATORY DISTRESS THE QUESTION OF WHETHER REDUCTION IN PULMONARY CAPILLARY FLOW OCCURS EARLY OR LATE WILL BE INVESTIGATED. METHODS WILL BE DEVELOPED FOR EVALUATING THE EFFECTS OF THERAPY.

A425 RADIOCOPPER AND RADIIRON STUDIES IN WILSON'S DISEASE, NS-7102-01, ORLEANS, LOUISIANA, 9/69-8/70, CONTINUATION, $29,935. NINDS
THIS RESEARCH PROPOSES TO INVESTIGATE COPPER AND IRON METABOLISM USING RADIOACTIVE TRACERS, IN HOMOZYGOTES AND HETEROZYGOTES OF WILSON'S DISEASE.
A430 RED CELL AND SERUM FACTORS AS GENE MARKERS IN CHILDREN, HD-02723-0251, DIAMOND, LOUIS R., BLOOD GROUP LABORATORY OF BOSTON, INC., BOSTON, MASS., 7/69-11/69, CONTINUATION, $3,375. NICHID

This research proposes to determine the location of structural and functional centers on human proteins using 30 or more red cell antigens and 10 or more plasma protein types. The blood samples will be obtained from patients with chromosomal aberrations characterized by either extra or deficient chromosomal material.

A431 RENAL FUNCTION IN THE MATURING FETUS; HD-04401-01, SMITH, FRED G., JR., UNIVERSITY OF CALIFORNIA; LOS ANGELES, CALIFORNIA, 6/70-5/71, INITIAL, $45,379; NICHID

The major goal of this investigation is to study the physiologic maturation of the fetal lamb kidney and to quantitate the contribution of the fetal kidney in compensating for various types of fetal distress. Specifically, the following are to be considered: (1) relative rates of glomerular filtration and renal tubular function, (2) the effects of induced metabolic acidosis on the fetus and the contribution of the fetal kidney in compensating for fetal acidosis, (3) the effects of intrauterine maturation on the role of the kidney in the fetus and in the newborn, (4) the role of thyrotropic hormone and on the fetus's overall ability to regulate fluid and electrolyte balance, and (5) the role of the kidney in the etiology of hyperphosphatemia and tetany of the newborn infant and developing fetus.

A432 ROLE OF BRANCHED CHAIN AMINO ACIDS IN BRAIN DEVELOPMENT AND FUNCTION; HD-04458-04, BIEBER, ALLAN, BOSTON MEDICAL CENTER, BOSTON, MASS, 6/70-5/71, CONTINUATION, $16,338; NICHD

This research proposes to apply thermal dilution techniques to the quantitative study of shunts in the circulation system. Using these techniques the effects of various forms of therapy can be evaluated.

A433 RENAL FUNCTION IN THE MATURING FETUS; HD-04460-01, SMITH, FRED G., JR., UNIVERSITY OF CALIFORNIA; LOS ANGELES, CALIFORNIA; 6/70-5/71, INITIAL, $45,379; NICHID

This research proposes to determine the location of structural and functional centers on human proteins using 30 or more red cell antigens and 10 or more plasma protein types. The blood samples will be obtained from patients with chromosomal aberrations characterized by either extra or deficient chromosomal material.

A434 ROLE OF BRANCHED CHAIN AMINO ACIDS IN BRAIN MATURATION AND DEVELOPMENT; HD-04467-04, BIEBER, ALLAN, BOSTON MEDICAL CENTER, BOSTON, MASS, 6/70-5/71, CONTINUATION, $15,520, NINDS

This research will study the mechanism of action of the branched chain amino acids upon the depressed myelin and lipids maturation in brains of young rats.

A435 STUDY OF COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research aims to obtain information on the copper proteins present in normal brain and in immature and adult liver and kidney. These proteins will be isolated and subjected to fractionation and characterization. The role of the copper proteins in the protection of the liver against hepatic necrosis and the role of copper in the development of an animal model for copper storage diseases will be studied.

A436 ROLE OF BRANCHED CHAIN AMINO ACIDS IN BRAIN MATURATION AND DEVELOPMENT; HD-04467-04, BIEBER, ALLAN, BOSTON MEDICAL CENTER, BOSTON, MASS, 6/70-5/71, CONTINUATION, $15,520, NINDS

This research proposes to apply thermal dilution techniques to the quantitative study of shunts in the circulation system. Using these techniques the effects of various forms of therapy can be evaluated.

A437 SOCIAL DEVELOPMENT AFTER MALNUTRITION IN INFANCY; HD-04513-03, WILD, GAYNOR C., UNIVERSITY OF MONTANA; MISSOURLI; MONTANA; 6/70-5/71, INITIAL, $57,020; NICHD

The primary objective of this proposal is to provide a direct comparison between the effects of early social deprivation and early protein malnutrition on the development of social behavior in the rhesus monkey. Infants are brought under one of the following conditions for one year: (1) normal protein nutrition and extensive social experience, (2) low protein nutrition and extensive social experience, (3) normal protein and limited social experience, (4) low protein and limited social experience. The development of learning, curiosity and manipulatory behavior, as well as social development, will be assessed during the first year of life and after rehabilitation.

A438 STUDIES IN GENETICALLY-DETERMINED NEUROLOGICAL DISEASES, NS-02701-04, (FORMERLY 7255-07), AUSTIN, JAMES H., UNIVERSITY OF COLORADO MEDICAL CENTER, DENVER, COLORADO, 9/69-8/70 CONTINUATION, $56,352, NINDS

This research proposes to study pulmonary surfactant and hyaline membrane disease in infants suffering from congenital respiratory diseases. These biopsies are obtained following rigidly controlled precautions and are treated for electron microscopic study, Type A histochemistry, and microchemistry.

A439 STUDY OF COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research proposes to study brain lipid chemistry. The study concerns the inter-relationship of structure and function.

A440 STUDY OF COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research aims to obtain information on the copper proteins present in normal brain and in immature and adult liver and kidney. These proteins will be isolated and subjected to fractionation and characterization. The role of the copper proteins in the protection of the liver against hepatic necrosis and the role of copper in the development of an animal model for copper storage diseases will be studied.

A441 STUDY OF COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research aims to obtain information on the copper proteins present in normal brain and in immature and adult liver and kidney. These proteins will be isolated and subjected to fractionation and characterization. The role of the copper proteins in the protection of the liver against hepatic necrosis and the role of copper in the development of an animal model for copper storage diseases will be studied.

A442 STUDIES IN EXPERIMENTAL ERYTHROBLASTOSIS PELTIS; HD-0138506, JACKSON, BENJAMIN T., BOSTON UNIVERSITY; BOSTON, MASSACHUSETTS, 1/70-12/70 CONTINUATION, $45,046; NICHD.

This research concerns the development and further study and definition of an animal model for in utero fetal hemolytic disease, and will be carried out in dogs and based upon the previously well described blood group systems in that species.

A443 STUDIES IN COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research proposes to study brain lipid chemistry. The study concerns the inter-relationship of structure and function.

A444 STUDIES IN COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research proposes to study brain lipid chemistry. The study concerns the inter-relationship of structure and function.

A445 STUDIES IN COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research proposes to study brain lipid chemistry. The study concerns the inter-relationship of structure and function.

A446 STUDIES OF COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research proposes to study brain lipid chemistry. The study concerns the inter-relationship of structure and function.

A447 STUDIES IN COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research proposes to study brain lipid chemistry. The study concerns the inter-relationship of structure and function.

A448 STUDIES IN COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research proposes to study brain lipid chemistry. The study concerns the inter-relationship of structure and function.

A449 STUDY OF COPPER PROTEINS IN NORMAL AND DISEASED BRAIN, NS-03670-02, WILD, GAYNOR C., UNIVERSITY OF NEW MEXICO MEDICAL SCHOOL, ALBUQUERQUE, NEW MEXICO, 12/69-11/70, CONTINUATION, $26,142. NINDS

This research proposes to study brain lipid chemistry. The study concerns the inter-relationship of structure and function.
A531 TRANSPLACENTAL PASSAGE OF Fetal ERYTHROCYTES; HD-00505-01; COHEN, FLOSIE; CHILD RESEARCH CENTER OF MICHIGAN; DETROIT, MICHIGAN; 4/70-7/71; RENEWAL; $49,897; NICHD.

This research concerns the transplacental passage of fetal erythrocytes and its relationship to immunization of pregnancy. Several women are being studied during consecutive pregnancies previously sensitized women requiring antepartum transfusion and the more severe cases where the infants require intrauterine transfusion are included in the study.

A532 ULTRASTRUCTURE AND QUANTITATION OF SURFAC TANT; HD-02459-04; KIKAWA, YUTAKA; YESHIVA UNIVERSITY; NEW YORK, NEW YORK; 9/69-8/70; RENEWAL; $27,306; NICHD.

This research concerns the development of more practical tests for rubella and the use of rubella immunization in risk. The objective is to develop practical rubella tests for use in the blood bank and in the evaluation of the immune status of the general population. The development of new immunization agents and the improvement of existing ones is also being studied.

A533 ULTRASTRUCTURAL STUDIES OF THE LUNG; HD-02459- 04; KIKAWA, YUTAKA; YESHIVA UNIVERSITY; NEW YORK, NEW YORK; 9/69-8/70; RENEWAL; $27,306; NICHD.

This research concerns the development of new immunization agents and the improvement of existing ones. The objective is to develop practical rubella tests for use in the blood bank and in the evaluation of the immune status of the general population. The development of new immunization agents and the improvement of existing ones is also being studied.

A534 WORKSHOP IN TERATOLOGY AS RELATED TO TOXICOLOGY; HD-00707-06; SCHIFF, GILBERT MARTIN; UNIVERSITY OF VIRGINIA COLLEGE OF MEDICINE, NEW YORK, NEW YORK; 9/68-6/70-1/71; INITIAL; $9,401; NICHD.

This grant is concerned with the establishment of a workshop in teratology as related to toxicology. The course of the workshop is to be held in the spring of 1970, and it will be recorded in the report on the workshop. All deliberations will be recorded with the possibility in mind that material may be derived for publication.

A535 EPIDEMIOLOGY

B001 CHILD HEALTH AND DEVELOPMENT STUDIES; HD-00718-11; J. J. ERUSBHALM, KIAIS FOUNDATION HOSPITALS, OAKLAND, CALIFORNIA; 4/70-3/71; CONTINUATION; $49,843; NICHD.

This research proposes to investigate the relationship of medical, genetic, biologic, and environmental factors in the parents, including events during pregnancy, labor, and delivery, to normal and abnormal development of offspring and to occurrence of neuropsychologic abnormalities.

B002 CLINICAL AND LABORATORY STUDIES ON RUBELLA; HD-00707-06; SCHIFF, GILBERT MARTIN; UNIVERSITY OF CINCINNATI; CINCINNATI, OHIO; 2/70-7/71; CONTINUATION; $44,129; NICHD.

This research concerns the development of new immunization agents and the improvement of existing ones. The objective is to develop practical rubella tests for use in the blood bank and in the evaluation of the immune status of the general population. The development of new immunization agents and the improvement of existing ones is also being studied.

B003 EPIDEMIOLOGY OF MENTAL RETARDATION IN A RURAL COUNTY; HD-00707-06; P. D. JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND; 12/68-11/30/70; CONTINUATION; $50,000; NICHD-MCHS.

This research proposes to uncover every case of mental retardation in an enumerated and clinically

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SCREENER POPULATION OF A POLITICAL SUBDIVISION IN MARYLAND. HOUSEHOLDS WITH A RETARDED PERSON WILL BE EXTENSIVELY INVESTIGATED ON SOCIAL, ECONOMIC, MEDICAL, EDUCATIONAL AND VOCATIONAL VARIABLES AND WILL BE COMPARED WITH CONTROL HOUSEHOLDS.

B006 GALACTOSEMIA GENETICS, INCIDENCE AND PATHOPHYSIOLOGY; HD-01974-05; BEUTLER, ERNEST; CITY OF HOPE MEDICAL CENTER, DUARTE, CALIFORNIA; 2/70-1/71; CONTINUATION; $62,260; NICHD.

This research concerns the screening for galactose I-phosphate uridyltransferase deficiency in Caucasian populations, and the prevalence of the gene in the general population. The relationship of galactosemia to other genetic and environmental factors will be investigated. The biochemical characteristics of human red cell galactose I-phosphate uridyltransferase under study.

B010 HUMAN CAROMOSOMAL DEFECTS-Epidemiology and etiology; HD-0022-06; ROBINSON, ARTHUR; UNIVERSITY OF COLORADO, DENVER, COLORADO; 1/69-6/71, CONTINUATION; $22,751; NICHD.

This research proposes to study the frequency of occurrence of chromosomal abnormalities in human and mammalian cells in vitro and in vivo to determine causal agents and their mode of action, and to establish chromosomal and biochemical markers which will permit analysis of these actions.

B011 SEQUELAE OF DUTCH FAMINE; HD-04454-01; STEIN, ZENA A.; NEW YORK STATE DEPT. MENTAL HYGIENE; NEW YORK, NEW YORK; 9/69-8/70; INITIAL; $64,035; NICHD.

This is a study designed to take advantage of a naturally occurring event. The crucial event - a famine - took place in the western part of the Netherlands from December 1944 until May 1945. The resulting malnutrition as it relates to time of conception, gestation, and delivery is the independent variable of primary interest. The dependent variables to be examined include mental retardation, psychological and neurological development, fertility and efficiency in child-bearing, genetic change, and mortality.

B013 THE INCIDENCE OF FETAL ERRORS OF GALACTOSE METABOLISM; HD-04761-01; MELLMAN, WILLIAM J.; UNIVERSITY OF PENNSYLVANIA; PHILADELPHIA, PENNSYLVANIA; 6/70-5/71; INITIAL; $22,617; NICHD.

This research is concerned with a determination of the incidence of galactosemia in homozygous fetuses due to a deficiency of galactokinase or galactose I-phosphate uridyl transferase. From a sample of 2000 pregnant women the carrier state of deficiency genes for these two enzymes will be identified. Metabolic consequences of the carrier state for these genes will be analyzed at various stages in the pregnant women and fetuses.

B015 SOCIOBEHAVIORAL STUDY CENTER FOR MENTAL RETARDATION MH-8667-06, EYMAN, RICHARD K.; PACIFIC STATE HOSPITAL, POMONA, CALIFORNIA; 10/1/69-9/30/70, RENEWAL; $328,405, NIH.

This research proposes to study the prognosis of the mentally retarded individual in his development as related to institutional life, his interaction with his family, and with greater social structures in the community.

B020 THE EPIDEMIOLOGY OF MATERNAL-NEONATAL INFECTIONS; CHD-00367-02; ALEXANDER, E. RUSSELL; UNIVERSITY OF WASHINGTON; SEATTLE, WASHINGTON; 9/69-8/70; CONTINUATION; $69,531; NICHD.

These studies are designed to evaluate the importance of certain maternal infections during pregnancy. To define the epidemiological pattern of their occurrence to determine the risk and character of subsequent disease in the infant. Initial studies are primarily concerned with cytomegalovirus, herpesvirus, and trachoma-inclusion conjunctivitis agents.

PATHOPHYSIOLOGY

C005 AMINO ACID INTERRELATIONS IN HUMAN METABOLIC DISEASE; HD-04608-02; NYHAN, WILLIAM L.; UNIVERSITY OF CALIFORNIA, SAN DIEGO, CALIFORNIA; 6/70-5/71, RENEWAL; $63,997, NICHD.

This is a study of a new disorder of amino acid metabolism in which leukopenia, mental retardation, and recurrent episodes of ketosis have been associated with elevated levels of blood ketone, urine, and cerebrospinal fluid. The interrelationships of amino acids in this disorder or metabolic disorders will be investigated. Other examples of previously undescribed errors of amino acid and fat metabolism will be investigated as they become available.

C015 AMINE METABOLISM IN PKU AND MENTAL DISORDERS; HD-1113-02; BLAU, KARL F.; UNIVERSITY OF NORTH CAROLINA, CHAPEL HILL, N.C.; 2/70-1/71; CONTINUATION; $19,960; NICHD.

The aim of this research is to compare normal brain amine metabolism to that in phenylketonuria, and in clinical depression. Opportunities may also arise to apply the procedures in the research to similar studies of other mental disorders, particularly galactosemia and schizophrenia.

C025 AUTONOMIC ACTIVITY IN MENTALLY DEFECTIVES AND NORMALS; HD-02744-03; CLAUSEN, JOHS; NEW YORK STATE DEPARTMENT MENTAL HYGIENE; NEW YORK, NEW YORK; 8/69-7/70; CONTINUATION; $18,321; NICHD.

The major objective of this research is to determine the differences in autonomic functioning of mentally defectives and normals. GSR, systolic blood pressure, and heart rate and heart rate measurements obtained from subjects with phenylketonuria and Down's syndrome. Attempts will be made to correlate autonomic activity and I.Q. level.

C029 ANALYSIS OF BRAIN ELECTRICAL ACTIVITY OF INFANTS; NS-8141-01A1 AND -01A1S1, LOWENBERG, EDMIN C.; UNIVERSITY OF NEBRASKA, LINCOLN, NEBRASKA; 8/69-8/70 EXTEND TO 4/71-01A1, AND 8/69-8/70-01A1S1, INITIAL; $1,243-01A1 AND $3,143-01A1S1, NINDS.

Research on mental retardation and problems related to the development of the CNS in infants. By developing methods in analyzing averaged evoked potentials recording brain electrical activity.

C040 THE BEHAVIORAL BIOLOGY LABORATORY; HD-04355-02; CHAPMAN, LORING; UNIVERSITY OF CALIFORNIA; LOS ANGELES, CALIFORNIA; 6/70-5/71; CONTINUATION; $145,643; NICHD.

This project is investigating biological, behavioral, and environmental methods for optimizing or improving human behavioral capacity. The goal is to comprehend, identify, and reduce or avoid biological and sociocultural factors that interfere with their full development.

C050 AMMONIA, BILIRUBIN, AND LOW THIAMINE ENCEPHALOPATHIES; NS-5841.05S1; SCHENKER, STEVEN; UNIVERITY OF TEXAS SOUTHWEST MEDICAL SCHOOL, DALLAS, TEXAS; 6/69-7/70; RENEWAL; $29,069-05S1, $145,643-05S1, NINDS.

This research proposes to study the interference with cerebral energy metabolism due to excess NH3 as a cause of hepatic encephalopathy.

C055 BIOCHEMISTRY OF HUMAN CHROMOSOMAL ANEUPLOIDS; HD-00585-08; MELLMAN, WILLIAM J.; UNIVERSITY OF PENNSYLVANIA; PHILADELPHIA, PENNSYLVANIA; 6/70-5/71; CONTINUATION; $53,359; NICHD.

This research concerns fibroblast cells derived from the skin of patients with aneuploidy and biochemically defined, genetically, and environmentally different. These cell cultures are being tested for the presence of biochemical defects.

C065 BIOCHEMICAL AND MOLECULAR BASIS OF MENTAL DISEASE; HD-01594-05S1, SHAW, KENNETH N.F.; CHILDREN'S HOSPITAL, LOS ANGELES, LOS ANGELES, CALIFORNIA; 5/70-5/71, CONTINUATION; $3,126, NICHD.

This research proposes to continue screening of urines from mentally retarded patients for metabolic abnormalities with the use of chemical tests and paper chromatography. Patients found to be abnormal will be investigated in more detail to indicate that these biochemical, clinical, or therapeutic information may be obtained.
C070  **BIOCHEMICAL DEFECTS RELATED TO CONGENITAL ANOMALIES, HD-0344-03, SCHAFER, IRWIN A., CASE WESTERN RESERVE UNIVERSITY, CLEVELAND, OHIO, 9/69-8/70, CONTINUATION, $36,117. NICHID**

This research proposes to gain an understanding of the molecular mechanisms of formation of teratogenic agents, and relate this to the production of specific human malformations.

C080  **BIOCHEMICAL STUDIES OF MYE林IZATION NS-8712-02 FORMERLY NS-5390, MCKHANN, GUY M., JOHNS HOPKINS HOSPITAL, BALTIMORE, MARYLAND 1/70-12/70, RENEWAL, $18,630. NINDS**

Investigating the synthesis of lipid components of myelin by the isolation and characterization of enzymes of brain involved in the synthesis of individual lipids, particularly galactolipids, and the characterization of soluble lipoproteins of brain.

C085  **BIOCHEMISTRY OF SPHINGOSINE AND SPHINGOLIPIDS, NS-6770-03 AND NS-6770-03S2, MOSCATELLI, EZIO A., UNIV. OF TEXAS SOUTHWESTERN MEDICAL SCHOOL, DALLAS, TEXAS, 9/68-4/70 NS-6770-03 CONTINUATION $10,376, 10/69-4/70 NS-6770-03S2, $10,376, NINDS**

This research focuses upon sphingosine base compositions and other compositional data to be accumulated on sphingolipids of normal mature, normal immature, and disease human brain. Similar studies will be made of sphingolipids of normal and other tissues of various species.

C100  **BRAIN BARRIER SYSTEM MECHANISMS FOR AMINO ACIDS, NS-4360-08, LATJA, ABEL, RESEARCH INSTITUTE FOR NEUROCHEMISTRY AND DRUG ADDICTION, NEW YORK, N.Y., 1/70-12/70, CONTINUATION, $38,636. NINDS**

The purpose of this research is to investigate the basic mechanisms of amino acid transport and the mechanisms by which they are regulated.

C105  **BRAIN DEVELOPMENT IN NORMAL AND MUTANT MICE, NS-8359-02, (NS-5262 AND NB-4792 COMBINED), SIDMAN, RICHARD L., HARVARD MEDICAL SCHOOL, BOSTON, MASS., 1/70-12/70, CONTINUATION, $149,820. NINDS**

The research involves the study of mice with inherited diseases of the brain, particularly diseases that affect the brain while it is forming. The behavior of developing brain cells is analyzed in order to give new ideas on normal brain development and to suggest mechanisms of human diseases causing mental retardation.


This research proposes to determine the influence of environmental changes, and of responses to these changes, on the metabolism of macromolecules of the central nervous system. The ultimate goal is to determine the functions of RNA and protein in learning, memory, habituation, imprinting and motivation.

C115  **BRAIN FUNCTIONS IN METABOLIC DISORDERS, NS-4928-06, POSNER, JEROME B., CORNELL UNIVERSITY MEDICAL COLLEGE, NEW YORK, N.Y., 9/69-8/70, CONTINUATION, $54,844. NINDS**

This research proposes to investigate in metabolic diseases relationships between the brain and its electrical and biochemical function and systematic chemical abnormalities.

C130  **CELL ORGANELLE DYSFUNCTION IN NEUROLOGICAL DISEASES-6276-02, HERMAN, MARY M., STANFORD UNIVERSITY, STANFORD, CALIFORNIA, 2/70-1/71, CONTINUATION, $21,090. NINDS**

Research on cell organelle dysfunction in metabolic and 'degenerative' CNS diseases including glycogen storage disease type II, metachromatic leukodystrophy, Gaucher's disease, and Tay-Sachs disease as well as Elsberg's disease and juvenile lipidosis associated with lysosomal abnormality.

C135  **CEREBRAL ENZYMES IN NORMAL AND CONVULSIVE STATES, NS-6294-05, SELLINGER, D.Z., UNIVERSITY OF MICHIGAN SCHOOL OF MEDICINE, ANN ARBOR, MICH., 6/70-3/71, CONTINUATION, $52,158. NINDS**

This research involves delineation of the mode of attachment of cerebral glutamine synthetase to subcellular membranes. Investigating the diversity in subcellular location of cerebral lysosomal hydrolases and study of the mechanisms whereby methionine sulfoximine, a convulsant with periodic action inactivates the enzyme glutamine synthetase.

C170  **CNS AND NUTRITIONAL INFLUENCES OF AMINO ACIDS IN PKU, MR-07005-05, OLIVER, NORMA S., UNIVERSITY OF MICHIGAN, ANN ARBOR, MICH., 12/69-12/31/69, RENEWAL, $14,728. SRSMR**

This research focuses upon the central nervous system and nutritional effects of low phenylalanine treatment or the lack of it on the variable manifestations of phenylketonuria in 54 patients. The groups are being compared with regard to treatment from the first few weeks of life and older normal children and adults with untreated phenylketonuria.

C180  **COMPLEX GLYCOLIPIDS OF BRAIN AND RELATED SYSTEMS, NS-8258-02, ROSENBERG, ABRAHAM G., PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK, HERSHEY, PA., 10/69-9/70, CONTINUATION, $76,325. NINDS**

Research to expand knowledge and understanding of lipids by emphasizing studies on specific roles of glycolipids in developing cellular structures and in selected membrane systems in order to attack those nervous system diseases involving derangements of lipid metabolism.

C190  **CORTICAL DENDRITES, NS-7870-03, FORMERLY NB-4239-05, COLEMAN, PAUL, UNIVERSITY OF ROCHESTER SCHOOL OF MEDICINE AND DENTISTRY, ROCHESTER, N.Y., 1/69-12/70, CONTINUATION, $22,655. NINDS**

This research focuses upon brains of 1 maze-bright and 1 maze-dull rats stained according to the Golgi-Cox method. The rats were reared in the Hebb-Williams maze and Lashley maze. Brains of rats reared in the dark have been stained according to the Golgi-Cox method. Dendrites of individual cells of the rats and cats will be measured and counted.

C195  **CYTOLOGIC STUDIES IN DISEASES OF THE NERVOUS SYSTEM, NS-2255-12, TERRY, ROBERT D., ALBERT EINSTEIN COLLEGE OF MEDICINE Yeshiva UNIVERSITY, BRONX, N.Y., 12/69-11/70, CONTINUATION, $57,507. NINDS**

This research will study the morphologic, metabolic and chemical characteristics of neurofibrillary tangles induced in rabbits. Plaque-like lesions found in chronic animals will also be studied.

C200  **DERMATOGYPHYLICS IN MENTAL RETARDATION; HD-01507-05; ALTER, MILTON; UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINNESOTA; 11/69-10/70; CONTINUATION; $25,747 NICHD**

This research concerns the relationship of dermatoglyphic patterns and conditions associated with extra autosomal chromosomes disorders due to extra or deficient sex chromosomes disruptions due to chromosomal deletions and mosaic states, conditions attributable to a single autosomal gene, and conditions without a clear genetic basis.

C210  **EFFECT OF AMINO ACIDS ON METABOLISM, EEG, AND BEHAVIOR, HD-01823-05 MICKEAN, CHARLES M., CALIFORNIA STATE DEPT OF MENTAL HYGIENE, ELDRIDGE, CALIFORNIA, 4/70-3/71 CONTINUATION, $116,325. NICHID**

This research focuses upon the therapeutic significance of the possibility of a resulting qualitative or quantitative cerebral protein synthesis in human CSF and in the CSF and brains of NOS rendered hyperphenylalaninemic in infancy. Preliminary data suggest that changes in the presence of high CSF phenylalanine is being further studied.

C220  **EFFECTS OF ACUTE BILIRUBIN INTOXICATION ON THE CNS, NS-6899-03, SCHUTTA, HENRY S., PENNSYLVANIA STATE UNIVERSITY, UNIVERSITY PARK, PENNSYLVANIA, PA., 11/69-8/70, CONTINUATION, $22,740. NINDS**

This research proposes to define the morphology of lesions occurring in acute bilirubin intoxication since it appears that the acute type of bilirubin damage bears a closer relationship to the events occurring in human bilirubin intoxication.
C335 HISTOPATHOLOGIC PATTERNS IN THE BRAIN, NS-7388-
C320 GANGLOSIDE INDUCTION DURING EMBRYONIC
C275 EXPERIMENTAL METABOLIC ENCEPHALOPATHIES, NS-
C265 ETIOLOGY AND CONSEQUENCES OF PERINATAL BRAIN
C255 EMBRYOGENESIS OF THE ADRENERGIC NERVOUS-
C245 ELECTRON MICROSCOPY OF THE NERVOUS SYSTEM, EEG STUDIES IN NEWBORN AND YOUNG INFANTS, NS-
C235 AND METALS.
C200 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C190 MOLECULAR BASIS OF CEREBRAL DEGENERATION, NS-
C185 MICROCHEMICAL PATHOLOGY OF CEREBRAL CORTEX
C180 METABOLISM OF ARYL AMINO ACIDS IN THE
C170 LYSINE METABOLISM IN INFANTS AND CHILDREN HD-
C165 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C160 NOTED APPROACHES TO NEUROBIOLOGICAL
C155 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C150 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C145 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C140 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
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C100 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C95 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C90 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C85 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C80 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C75 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C70 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C65 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C60 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
C55 INTEGRATED APPROACHES TO NEUROBIOLOGICAL
This research proposes to extract and fractionate brain proteins, and to characterize them with respect to amino acid composition, cellular localization, functional phenotype, developmental, genetic and pathological variation. Isolated fractions will be examined for their synthesis and degradation of the polypeptide chain, and for exchange of episomal and nuclear.

C461 MOLECULAR SWITCHES IN THE CENTRAL NERVOUS SYSTEM, NS-428-02, SCHOWEN, RICHARD L., UNIVERSITY OF KANSAS, LAWRENCE, KANSAS, 2/70-1/71, CONTINUATION, $19,426 and NS-4179-065, 5/69-12/69, $1,218. NINDS

This research involves a fine structural and electron-microscopic-chemical study of synapses in the lobster's stomatogastric ganglion. Sub-cellular localization of the electrophoretically separable multiple monoamines and acetylcholinesterase found in skeletal muscle and brain of chickens and light microscope studies of degeneration and regeneration of neurons in the central nervous system of spiny lobsters.

C460 NEURAL MECHANISMS OF LEARNING AND BEHAVIOR, NS-4179-06 and NS-4179-065, MAYNARD, EDITH A., UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN, 9/67-12/69, CONTINUATION, $16,066. NINDS

This research proposes a combined program of behavioral and neurophysiological experiments focused on the problem of neural mechanisms of learning, a comparatively simple organism whose nervous system provides favorable material for a fine grained neurochemical analysis. The marine gastropod Aplysia Californica is the choice of organism for the study.

C470 NEUROPATHOLOGY OF THE AGING MENTAL RETARDATE, NS-5822-04, SOLITARE GILBERT B., YALE UNIVERSITY SCHOOL OF MEDICINE, NEW HAVEN, CONN., 8/69-7/70, RENEWAL, $10,304. NINDS

This research concerns a detailed histopathological study of the brains of mentally retarded individuals, including histo-chemical and electron-microscopic techniques, with particular emphasis upon the adult population.

C475 NEUROSENSORY CENTER ST-3554-09, VAN ALLEN, MARCIA, UNIVERSITY OF IOWA, IOWA CITY, IOWA 1/69-10/70, CONTINUATION, $521,056. NINDS

This project supports investigations, both individual and collaborative in neurology, ophthalmology and psychology.

C510 PHYSIOLOGY OF NORMAL AND ABNORMAL GROWTH AMINO ACIDS, HD-04538-02; NYHAN, WILLIAM L., UNIVERSITY OF CALIFORNIA, SAN DIEGO, CALIFORNIA; 6/70-7/71; CONTINUATION, $20,415; NICH

This research involves the study of a large number of variables in children with homogenous types of growth failure, and in control children in normal growth. Major emphasis will be placed on traumatizing growth retardation and viral infection on human growth.

C525 QUANTITATIVE HISTOCHEMICAL STUDIES UPON CEREBRAL CORTEX, NS-361-17, POPE, ALFRED, MCLEAN HOSPITAL, BELMONT, MASS., 11/70-12/70, RENEWAL, $17,435. NINDS

This research concerns experiments on the architectural profile of selected chemical structural components and enzymes in cortexes from patients with cerebral lesions, including correlations of biochemical data with histopathological findings. Experiments will be made on rats on the distribution patterns within selected cortical layers. Some data on white matter, and caudate nucleus of selected chemical structural components in relation to experimental cyanide encephalopathy.


Research on the mechanisms of RNA and protein synthesis in brain to determine how these macromolecules are increased during physiological stimulation and intercellular communication. RNA and protein constituents may be affected in patients with demyelination and other metabolic derangements of the central nervous system.

C560 STUDIES IN HUMAN GENETICS, HD-00486-15, CHILD, BRANTON, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD., 10/69-9/70, CONTINUATION, $58,979. NICHD

This research concerns cytogenetic studies of patients with chromosome abnormalities, enzyme variation in Drosophila, and study of lipid metabolism in a patient with hyperglycinemia.

C575 STUDIES OF TETRAPLOID DNA STATUS OF PURPURENE CELLS, NS-7100-01, LAPHAM, LOWELL W., UNIVERSITY OF ROCHESTER MEDICAL CENTER, ROCHESTER, NEW YORK, 2/69-9/70, CONTINUATION, $15,313. NINDS

This research proposes to achieve an understanding of the significance of tetraploidy in Purpurene neurons in terms of its role in brain development. Normal and tetraploid pregnant females will be used to provide animals which can be studied at successive intervals throughout the period of prenatal and postnatal maturation of the cerebellum.

C585 LIPID COMPOSITION OF BRAIN IN PATHOLOGICAL STATUS, NS-1847-12, ROUSER, GEORGE, CITY OF HOPE MEDICAL CENTER, DUARTE, CALIFORNIA, 10/69-9/70, CONTINUATION, $46,129; NICHD

This research proposes to study the roles of polar lipids of the nervous system in animals and man and to correlate findings with pathology, enzymology and permeability, and to define alterations in lipids composition of brain and sub-cellular particles of brain in some pathological states in man.

C590 STUDY OF MEIOSIS IN RELATION TO MENTAL RETARDATION HD-4549-02; MELNYK, JOHN, CITY OF HOPE NATIONAL MEDICAL CENTER, DUARTE, CALIFORNIA, 6/70-5/71; RENEWAL, $54,746. NICHD

The purpose of this study is to examine the meiotic chromosomes of retarded individuals, with and without anatomical congenital malformations, who do not demonstrate mitotic chromosomal aberrations. The hypothesis is that reciprocal translocations, paracentric inversions, very small deletions, and additions will be detectable at meiosis, but not at mitosis, and that these aberrations may be associated with recognizable abnormalities of structure and function.

C591 STUDIES OF THE METABOLISM OF L-N-ACETYL-L-ASPARTIC ACID, NS-9353-01, FORMERLY HD-NS-4672-01, GOLDSMITH, F.R., LETCHWORTH VILLAGE HOSPITAL, THIELLS, N.Y., 1/70-12/70, INITIAL, $16,405. NINDS

Study of the metabolism of L- and D-N-acetyl-l-aspartic acid from the subcellular, anatomical, developmental, and interspecies distribution of the compound and the enzyme systems catalyzing its synthesis and degradation. Its role is unknown but its phlogistic distribution implies a connection with the development of higher intellectual capacity.

C595 STUDY OF NERVOUS SYSTEM DISORDERS, NS-1006-16, NORTON, WILLIAM T., ALBERT EINSTEIN COLLEGE OF MEDICINE Yeshiva University, BRONX, N.Y., 4/70-3/71, CONTINUATION, $51,647. NINDS

This research is concerned with isolating whole neuroglia and neuronal. Perikarya and the initiation of long range chemical and biochemical studies of these cells. Structural analysis of individual brain gangliosides will also be made.

C596 STUDIES ON SYNAPTOSOMES, NS-9333-01, GAMBETTI, PIERLUIGI, UNIVERSITY OF PENNSYLVANIA SCHOOL OF MEDICINE, PHILADELPHIA, PA., 10/69-9/70, INITIAL, $55,007. NINDS

Combining morphological and biochemical research on isolated synaptosomes for a better understanding of the role of synapses in mental retardation, learning and memory.
RESEARCH AND DEMONSTRATION GRANTS, 1970

C600 SURFACE AREA AND PATTERNS OF CORTICAL NEURONS, NS-30456-06, SCHAEDE, P., NETHERLANDS CENTRAL INSTITUTE FOR BRAIN RESEARCH, AMSTERDAM, THE NETHERLANDS, 1969-12/1/69, CONTINUATION, $7,000, NIHDS.

This research is concerned with the relationship between surface area of neurons and the development of electrical and biochemical parameters in chick and rabbit brains.

C605 THE DEVELOPMENT OF NORMAL AND ABNORMAL MYELIN LIPIDS, NS-52713-03, HANSEL, E. PETER, UNIVERSITY OF COLORADO MEDICAL CENTER, DENVER, COLO., 9/68-8/70, CONTINUATION, $28,691, NINDS.

The purpose of this research is to study the effects of malnutrition and distortion of amino acid homoeostasis on the rate of disposition and composition of myelin ceramides.

C610 TISSUE CULTURE IN HEREDITARY DISORDERS; HD-04252-02, NADLER, HENRY L., CHILDREN'S MEMORIAL HOSPITAL, CHICAGO, ILLINOIS, 5/70-4/71; CONTINUATION, $30,529, NICHD.

Cultivated cells obtained from patients with various genetic disorders will be utilized in an attempt to precisely define the optimal culture conditions for demonstration of the intracellular defect. (2) Determine which substances might be responsible for the correction of the defect in the culture. (3) Relate the cellular defect to the clinical manifestations, and (4) detect the heterozygote in order to provide more precise genetic counseling.

C635 VITAMIN B6 AND CENTRAL NERVOUS SYSTEM FUNCTION NS-5780-06, COURNS, DAVID B., ST. JOSEPH'S HOSPITAL, LANCASTER, PA., 6/70-5/70; CONTINUATION, $34,397, NINDS.

This research proposes to correlate biochemical findings in experimental vitamin B6 deficiency with the behavior of the animal in terms of ability to learn and retain memory of learning. Electroencephalographic tracings with evoked response techniques will provide information on the status of this neuro-physiological parameter for correlation with biochemical and behavioral data.

DIAGNOSIS AND/OR EVALUATION

D010 A FORTY YEAR FOLLOW-UP OF MENTAL RETARDEES, HD-03261-03, ROSS, ROBERT T., CALIFORNIA STATE DEPT OF MENTAL HYGIENE, SACRAMENTO, CALIFORNIA, 5/70-4/71; CONTINUATION, $93,073, NICHD.

This study proposes to follow up and test 655 subjects now in their initial testing years in the San Francisco Opportunity Rooms and found to have I.Q.'s of 80 or less. Control groups of 100 siblings and 100 classmates will be studied.

D011 ACQUISITION AND UTILIZATION OF CONCEPTUAL RULES; HD-03390-03, JOHNSON, PEDER J., UNIVERSITY OF NEW MEXICO; ALBUQUERQUE, NEW MEXICO; 2/70-1/71; CONTINUATION, $14,418, NICHD.

This research program is concerned with the investigation of factors influencing the acquisition and utilization of conceptual rules in children of various ages. Within this context three problems are being studied specifically. The first concerns the identification and manipulation of factors contributing to rule learning in children. A second problem concerns the way in which children of various ages encode the different conceptual rules. The final experiment deals with the identification of subject-specific strategies. In addition, special subpopulations of subjects for example mentally retarded children—will be observed for differences in rule learning.

D015 ADAPTIVE BEHAVIOR AND EGG IN MENTAL RETARDEES, KAROLYN J., MASS. STATE DEPT. OF MENTAL HEALTH, WRENTHAM, MASS., 2/70-6/70 CONTINUATION $600, NICHD.

This research proposes to relate particular EEG phenomena that have been found to be important to mental retardation, to the adaptive behavior of retardates as shown by retard's performance in the areas of personal self-care, intellectual functioning, educational achievement, and occupational status.

D020 AN AUTOMATED PSYCHOLOGICAL TESTING BOOTH MH-14864-01, ELWOOD, DAVID L., BARTHOLOMEW COUNTY MENTAL HEALTH CLINIC, COLUMBUS, INDIANA 47201, 1/71-7/71, $73,197, NICHD.

This research proposes the development of a technician operated automated psychological testing booth (TP) capable of presenting tape recorded verbal stimuli and performance of material (auditory and pictures) upon request from the subject (subject presses a button) and would be capable of making tape recorded records of the subject's response.

D021 ANALYSIS OF CHROMOSOME KARYOGRAMS; HD-03581-07, LEIDLEY, ROBERT C., NATIONAL BIOCHEMICAL RESEARCH FOUNDATION, SILVER SPRING, MARYLAND, 4/70-3/71; INITIAL, $61,133, NICHD.

The purpose of this research is to utilize specialized computer techniques for the completely automatic investigation of chromosome karyograms for each chromosome an attempt will be made to locate the ends of the arms and determine the position of the centromere and the overall arm lengths and area. Further development of computer utilization for intra-and interspecies statistical analyses of chromosome characteristics will be studied.

D025 ANALYTICAL STUDIES OF VISUAL PERCEPTION MH-5081-07 LEHOWITZ, HERSCHEL W., PENNSYLVANIA STATE UNIVERSITY PARK, PA., 11/70-12/31/70, RENEWAL, $27,300, NICHD.

This research aims to investigate various aspects of perceptual constancy with the goal of providing a quantitative data base on which to construct a theory of the mechanisms underlying these phenomena and to provide techniques for extending considerations of constancy phenomena within a more general context.

D030 AUDIOLICAL STUDY OF EEG OF THE MENTAL RETARDED, NS-7480-03, SHIMIZU, HIROSHI, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD., 9/69-8/70, CONTINUATION, $2,431, NINDS.

This research is concerned with analysis of EEG to acoustic stimulus in severely retarded subjects with chronic brain syndromes in comparison with those obtained from non-retarded subjects with a peripheral hearing impairment alone.

D035 BEHAVIORAL AND NEURAL EFFECTS OF INDUCED PKU. HD-03377-01, SCHALOCK, ROBERT L., HASTINGS COLLEGE, HASTINGS, NEBRASKA; 8/69-7/70, INITIAL, $19,372, NICHD.

The specific aim of this research is to investigate the similarities between induced and naturally occurring phenylketonuria. Rats previously fed with L-phenylalanine will be subjected to a variety of behavioral tests. An attempt will be made to relate PKU effects in human and rat subjects.

D036 A BEHAVIORAL EVALUATION PROGRAM FOR RETARDED CHILDREN MH-14880-01, BARRETT, BEATRICE H., WLATER E., FERNALD STATE SCHOOL, WAVERLY, MASSACHUSETTS, 9/69-8/70, RENEWAL, $43,158, NICHD.

This investigator is developing methods to more accurately assess the differences in learning capabilities of retarded children. Group behavior of retardates is also being studied. Attempting to correct disruptive behavior.

D045 CELLULAR ASPECTS OF HUMAN GENETICS AND IMMUNOLOGY HD-02552-04, HIRSCHHORN, KURT, MT. SINAI SCHOOL OF MEDICINE, NEW YORK, NEW YORK, 9/69-8/70, CONTINUATION, $5,114.

This is a broad research program which encompasses four related areas: immunogenetics, somatic cell genetics, human biochemical genetics and cyto genetics. The immunogenetic studies will be concerned with the immune capabilities of peripheral lymphocytes in culture, the area of somatic cell genetics, the studies will include the immune responsiveness of lymphocytes from persons with various dysgammaglobulinemia, to the viability of clones for resistance to viruses and the stability of genetic markers at the level of human lymphocytes. The primary concern is with inheritance of beta-globin protein variables. Finally, the cyto genetic studies are concerned with the detection of abnormal chromosome complements, particularly in clinical disorders.
D046 A CENTER FOR RESEARCH IN HUMAN LEARNING, HD- 01136-06, DARLEY, JOHN G., UNIVERSITY OF MINNEAPOLIS, MINNEAPOLIS, MINNESOTA; 9/69-8/70; CONTINUATION; $116,764, NICHD.

This research concerns a program in 6 areas of human learning, acquisition and utilization of language, emotional changes in learning processes, disturbances in learning processes, teaching methods and curriculum, developmental analysis of content learning through programmed instruction and integrative aspects of learning research.

D050 ULTRASTRUCTURAL BASIS OF NEUROPSYCHIATRIC DISEASE, NS-5572-06, GONATAS, NICHOLAS K., UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA.; 9/69-8/70, CONTINUATION; $47,292, NINDS.

This research is concerned with ultrastructural and cytochemical studies of human cerebral cortical biopsies.

D055 CEREBRAL IMPEDANCE AND HOMEOSTASIS, NS-7267-04, BIRZIS, LUCY, STANFORD UNIVERSITY, STANFORD, CALIFORNIA; 9/69-8/70, CONTINUATION; $44,142, NINDS.

This research involves the recording of local cerebral impedance changes in unanesthetized cats with permanently implanted brain electrodes. Slow changes in magnitude of impedance and phase changes correlated with the cardiac pulsations will be analyzed under various physiological conditions to gain understanding of the significance of brain impedance. The effects of sedatives and noxious stimuli will be studied.

D059 CNS MATURATION & EVOKED RESPONSES IN PREMATURITY INFANT; HD-01403-05, GORDON, HARRY; Yeshiva University; New York, New York; 8/69-7/71, RENEWAL; $5,940, NICHD.

This research proposes to correlate the electrophysiological findings, sensory evoked responses and behavioral maturation of the prematurely born infant and determine the relationship between these measurements and the concentrations in blood of a number of amino acids, as affected by renal amino acid clearances and by variations in dietary intake of protein, ascorbic acid, and other vitamins.

D060 CNS PLASTICITY DURING CRITICAL PERIODS OF DEVELOPMENT (1) HD-00113-03, BERMAN, A. J.; Jewish Hospital of Brooklyn; New York, New York; (1) 11/69-12/70, (2) 11/69-10/71, CONTINUATION; (1) $13,315, (2) $2,063,395, NICHD.

This study will investigate the plasticity of the CNS as a function of gestational age to determine critical periods of development affecting behavioral functioning in primates.

D065 COGNITION AND MOTIVATION IN RETARDED INDIVIDUALS HD-03048-03, ZIGLER, EDWARD, F., YALE U.; NEW HAVEN, CONN.; 1/69-11/70, CONTINUATION; $251,569, NICHD.

This study proposes to delineate cognitive factors which characterize retarded intellectual functioning from motivational factors which influence the performance of retarded persons. Institutionalized and non-institutionalized retardates with varying etiologies and M.A. and C.A. will be studied.

D070 COGNITIVE ASSESSMENT PROGRAM HD 5107-02, CALLAWAY, ENOCH, LANGLEY PORTER NEUROPSYCHIATRIC INSTITUTE, SAN FRANCISCO, CALIFORNIA; 12/69-11/70, CONTINUATION; $19,937, NICHD.

The purpose of this project is to study the development of cognitive efficiency in normal and clinically deviant children through the medium of response latency in performing simple tasks. Included in the study will be an examination of children with various types of mental retardation and emotional disturbance.

D080 COGNITIVE DEFICITS AND BRAIN DYSFUNCTION, NS-6192-03, DANNER, RAYMOND D.; MICHIGAN EEG CENTER AND ASSOCIATION, DETROIT, MICHIGAN; 1/69-12/69, CONTINUATION; $23,504, NINDS.

This research investigates the relationships of selected cognitive perceptual-motor abilities and cerebral dysfunction in children and adults with epilepsy. Variables such as type of seizure, location of brain dysfunction and personality functioning will be studied.

D085 COGNITION AND ATTITUDE IN TURNER'S SYNDROME; HD-01716-05, GARRON, DAVID C.; RUSH PRESBYTERIAN ST. LUKES MED CTR, CHICAGO, ILLINOIS; 11/69-10/70, RENEWAL; $16,233, NICHD.

This research proposes to delineate intellectual functioning in persons with Turner's Syndrome, a group of anatomic anomalies traced to chromosomal aberrations. This research is concerned to learn more about the development of special disorders and to correlate a delimited intellectual impairment with a specific chromosomal aberration is anticipated.

D086 COMMUNICATION DISORDERS OF THE MENTALLY RETARDED; HD-00870-07, SCHIEFEL BUSCH, R. L.; UNIVERSITY OF KANSAS; LAWRENCE, KANSAS; 10/69- 9/70, CONTINUATION; $105,251, NICHD.

This research proposes to establish a research setting in a deprived neighborhood and to formulate and initiate a program of research concerned with factors of inadequate development.

D090 DEFICITS IN BRAIN DAMAGE, NS-5559-06, VEGA, ARTHUR, JR., OKLAHOMA MEDICAL RESEARCH FOUNDATION, OKLAHOMA CITY, OKLA.; 11/69-12/70, RENEWAL; $18,137, NINDS.

This research is concerned with further development and cross-validation of the Holstein battery of tests for brain-damaged children. The battery will be extended downward to children of 3 years of age and an abbreviated form will be developed.

D091 DETECTION OF BLOOD GALACTOSE IN NEWBORN CHILDREN; HD-03927-02, PAIGEN, KENNETH; HEALTH RESEARCH INC; BALTIMORE, NEW YORK; 11/69-10/70, CONTINUATION, $24,082, NICHD.

The purpose of this project is to develop a simple diagnostic test for elevated blood galactose which can be applied to the mass screening of newborn children.

D092 DETECTION OF DOWN'S SYNDROME IN UTERO; HD-04919-01, GOODMAN, HAROLD O.; WAKE FOREST UNIVERSITY; WINSTON-SALEM, NORTH CAROLINA; 5/70-4/71, INITIAL; $17,055, NICHD.

The aim of this research is to develop a method for the detection of in utero Down's Syndrome by examining maternal blood. By the application of physical and biochemical alterations to leukocytes in tissue cultures, methods for separating the populations of mongoloid or fetal cells relative to adult leukocytes will be developed. The method will be tested by studying a large sample of pregnant females.

D095 DEVELOPMENT OF EEG AND BEHAVIORAL RESPONSES TO STIMULI HD-02296-05, BARNET, ANN B., CHILDREN'S HOSPITAL, BOSTON, MASSACHUSETTS; 1/70-11/70, CONTINUATION; $67,600, NICHD.

This research proposes to provide basic data on the maturation of the EEG and sensory evoked potentials of human infants during the course of development and will attempt to relate data obtained from psychological and neurological testing with the neurophysiological data.

D105 DIAGNOSTIC ASPECTS OF ELECTROENCEPHALOGRAPHIC AUDIOMETRY, NS-4799-07, SHEPHERD, DAVID C.; JEWISH HOSPITAL OF ST. LOUIS, ST. LOUIS, MO.; 4/70-3/71, CONTINUATION, $6,754, NICHD.

The purpose of this research is to refine the diagnostic utility of the averaged electroencephalographic response by means of auditory indices based upon abnormal relation among early and late components of simultaneous wave forms evoked from subjects with differing auditory disorders will be developed.

D110 EGG AND SLEEP STATE MATURATION IN INFANTS HD-0008- 02, PARMELLE, ARTHUR H., JR., UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIF.; 1/70-12/70, CONTINUATION; $28,500, NICHD.

This research deals with methods of assessing development of the central nervous system in the newborn and young infant, using physiologic and
ENZYMES IN CULTIVATED FETAL CELLS: HD-0433-01, NADLER, HENRY L.; CHILDREN'S MEMORIAL HOSPITAL, CHICAGO, ILLINOIS; 1/70-3/70; CONTINUATION; $21,250. This project is concerned with enzyme studies in cultivated fetal cells. The normal patterns of enzyme development, utilizing cultivated fluid cells, have been studied. Both quantitative and qualitative changes were demonstrated. These cells have been shown to be useful for the in vitro detection of both chromosomal aberrations and inform errors of metabolism during the first four months of pregnancy.

FACTORS CONTRIBUTING TO SUCCESSFUL COMMUNITY ADJUSTMENT OF DISCHARGED RETARDATEs RD-1606-P, BOWMAN, PETER W.; PINELAND HOSPITAL AND TRAINING CENTER, POWNAL, MAINE; 7/1/68-9/30/69; RENEWAL; $21,207. This research aims to provide a detailed description of the past and present lives of some 575 mentally retarded children discharged from Pineland Hospital and Training Center, and to determine what predictive elements in the past life trajectories are most closely associated with post-discharge success and non-success.

HYPO-RESPONSIVENESS IN BRAIN-DAMAGED CHILDREN, NS 7951-01, BROWNING, ROBERT M.; WISCONSIN CHILDREN'S TREATMENT CENTER, MADISON, WISCONSIN; 2/69-11/70; INITIAL; $24,441. The major concern of this research is the development of diagnostic procedures for the prediction of mild mental retardation. Specifically, auditory sensitivity measures will be obtained from neonates less than three days of age who have learned an instrumental response with contingent sensory stimulation as a reinforcement. Differences in terms of responsiveness will be correlated to subsequent intellectual development.

INKBLOT PERCEPTION AND PERSONALITY MH-3223-11, HOLTZMAN, WAYNE; UNIVERSITY OF TEXAS, AUSTIN, TEXAS; 9/69-8/31/70; RENEWAL; $31,725. This research proposes, in the 5th year of a 6-year longitudinal study, to give major emphasis to the developmental aspects of perception and related cognitive functioning in children. An overlapping design has been employed to study a 12-year development, and the span includes all ages. Subjects consist of 232 normal children from three different grade levels, 3 years apart, starting with the 4th grade.

LEARNING AND TRANSFER IN NORMAL AND RETARDED CHILDREN; HD-3917-02, CAMPIONE, JOSEPH C.; UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON; 2/69-11/70; CONTINUATION; $16,616. This project includes three sets of experiments: 1) To assess the relative contributions of verbal mediating responses and perceptual observing responses in mediating transfer of a discrimination; 2) To study the transmission of behavior in normal and retarded children; and 3) To compare the attentional behavior of normal and retarded subjects.

LEARNING AND TRANSFER PROCESS IN MENTAL DEFECTIVES MH-1099-13, ZEAMA, DAVID; UNIVERSITY OF CONNECTICUT, STORRS, CONNECTICUT; 9/69-8/31/70; RENEWAL; $75,019. This research focuses on the opposing effects of intradimensional and extradimensional shifts in attentional and retentional aspects of the discriminating learning of retardates.

LONGITUDINAL AND RELATED PSYCHONONAL STHS HD-3025-14, MONEY, JOHN; JOHNS HOPKINS UNIVERSITY, BALTIMORE, M.D.; 6/70-5/71; RENEWAL; $44,182. This research concerns homosexuality, precocious puberty and other syndromes childhood and adult maternality in endocrine and cytogenetic syndromes. Tomboyishness and androgenic syndrome male hetero-maphroditism, sex reassignment requests in her-maphroditism. Testicular feminization, syndromes of homosexuality and transsexualism and other phenomena in the XYY and XXY syndromes and body image in homosexuality and transsexualism and other phenomena.
RESEARCH AND DEMONSTRATION GRANTS, 1970

D180 QUANTITATIVE HUMAN CHROMOSOME STUDY AIDED BY COMPUTER; HD-0260-04; NEURATH, PETER W.; NEW ENGLAND MEDICAL CENTER HOSPITALS; BOSTON, MASSACHUSETTS; 6/70-5/71; RENEWAL; $31,240, NICHD

THIS RESEARCH CONCERNS THE PERFORMANCE OF CHROMOSOME ANALYSES IN GREATER DEPTH AND ON A LARGER PERCENTAGE OF PATIENTS BY MAKING USE OF THE DEVELOPMENT OF A COMPUTER-AIDED SYSTEM OF CHROMOSOME ANALYSIS. CLINICIANS CAN BE INCLUDED AT THE EARLIER STAGES OF GENETIC STUDIES, AND FAMILIES CAN BE ACCURATELY DIAGNOSED. THE DATA FROM THESE STUDIES WILL BE INTEGRATED INTO A MORE COMPREHENSIVE DESCRIPTION OF FUNCTIONAL LEARNING DISORDERS ASSOCIATED WITH MENTAL RETARDATION. ADDITION, BASIC INFORMATION WILL BE OBTAINED CONCERNING THE LEARNING AND RETENTION OF VERBAL MATERIAL BY NORMAL CHILDREN.

D185 RESEARCH IN DEVELOPMENTAL PSYCHOLOGY; HD-05027-01; STEVENSON, HAROLD W.; UNIVERSITY OF MINNESOTA; MINNEAPOLIS, MINNESOTA; 6/70-5/71; INITIAL: $165,406, NICHD

THIS PROJECT IS CONCERNED WITH SEVERAL AREAS OF DEVELOPMENTAL PSYCHOLOGY. THE THREE MAJOR AREAS LEARNING IN CHILDREN AND COGNITIVE DEVELOPMENT, SOCIALIZATION PROCESSES, AND PERCEPTUAL DEVELOPMENT. TOPICS TO BE STUDIED IN THE LEARNING CATEGORY ARE IN- INDIVIDUAL DIFFERENCES IN CHILDREN'S LEARNING, DEVELOPMENT OF STUDYING-MEMORIZATION STRATEGIES, DEVELOPMENT OF REINFORCEMENT AND COMMUNICATION SKILLS, MORAL JUDGMENT, AND MORAL CONDUCT AMONG MENTAL RETARDEES. SOCIAL DETERMINANTS OF CHILDREN'S LEARNING AND ATTAINMENT OF A VARIETY OF REINFORCERS. SUCH INFORMATION WOULD BE USEFUL, NOT ONLY TO THE UNDERSTANDING OF CONDITIONED REINFORCEMENT, BUT IT ALSO COULD BE EXTREMELY VALUABLE TO THOSE ENGAGED IN THE PRACTICAL PROBLEMS OF CHILD REARING, EDUCATION AND THERAPY.

D190 THE REASONING, MORAL JUDGEMENT, AND MORAL CONDUCT OF RETARDEES - PHASE TWO RD-3143-P; STEPHENS, WILL BETH, TEMPLE UNIVERSITY, PHILADELPHIA, PA. 5/170-4/30/71 CONTINUATION $76,000, SLS-ORD

TO ASSESS THE DEVELOPMENT OF MORAL REASONING, MORAL JUDGEMENT, AND MORAL CONDUCT AMONG MENTAL RETARDEES.

D195 SEX LINKED TRAITS IN TURNER'S SYNDROME - FAMILY STUDY; HD-03742-02; GARRON, DAVID C.; RUSH-PRESBYTERIAN-ST. LUKES MEDICAL CENTER, CHICAGO, ILLINOIS; 11/69-10/70; CONTINUATION; $9,851, NICHD

THIS RESEARCH IS CONCERNED WITH HYPOTHESIS THAT SPARE CHROMOSOMES IN FAMILIES IN WHICH ONE PHENOTYPIC MALE SIB POSSESSES AN X SEX CHROMOSOME COMPLEMENT STUDY THE INFLUENCE OF MOTHERS, FATHERS, NORMAL BROTHERS, AND NORMAL SISTERS OF THE SIB WITH TURNER'S SYNDROME WILL BE TESTED.

D196 SIGNIFICANCE OF VARIATION DURING CHILD GROWTH; HD-00157-10; SAVARA, BHIM SEN; UNIVERSITY OF OREGON; PORTLAND, OREGON; 1/70-12/70; RENEWAL; $36,181, NICHD

THIS IS A LONGITUDINAL STUDY OF DENTAL FACIAL GROWTH AND DEVELOPMENT FROM BIRTH TO MATURE STAGE. THE PRIMARY GOAL IS TO DETERMINE THE INFLUENCE OF FACIAL GROWTH, DENTITION, PHYSICAL GROWTH, PHYSIQUE, AND SKELETAL MATURATION ON THE GROWTH. ADDITIONAL GOAL IS TO DETERMINE THE SIGNIFICANCE OF VARIATION DURING CHILDA WITH ENDOCRINE DISORDERS OR GENETIC SYNDROMES.

D200 SHORT-TERM MEMORY IN THE RETARDED CHILD; HD-02898-04; SCOTT, KEITH G.; UNIVERSITY OF ILLINOIS, URBANA, ILLINOIS; 6/70-5/71; RENEWAL; $16,277, NICHD

THIS RESEARCH PROPOSES TO INVESTIGATE THE CAUSES OF INTERFERENCE IN CHILDREN'S SHORT-TERM MEMORY AND HOW THIS RELATES TO INTELLIGENCE AND DEVELOPMENT. THE RESULTS SHOULD GIVE FURTHER INFORMATION ABOUT PROCESSES AND CONTRIBUTE TO THE TRAINING AND MANAGEMENT OF THE RETARDED.

D205 STIMULUS FACTORS IN VERBAL LEARNING OF RETARDEES; HD-02588-05; BAUMEISTER, ALFRED A.; UNIVERSITY OF ALABAMA; UNIVERSITY, ALABAMA; 6/70-5/71; CONTINUATION; $25,655; NICHD

THE GOAL OF THIS PROJECT IS TO INVESTIGATE CERTAIN ASPECTS OF VERBAL LEARNING PROCESSES IN RELATION TO MENTAL RETARDATION. EXPERIMENTS ARE BEING CONDUCTED TO DETERMINE THE PARAMETERS THAT AFFECT LEARNING RATE AND RETENTION IN PERSONS WITH LOW INTELLIGENCE. FACTORS WHICH GOVERN THE SELECTION AND UTILIZATION OF CUES IN ASSOCIATIVE VERBAL LEARNING ARE OF PRIMARY CONCERN. TWO LINES OF INVESTIGATION ARE BEING FOLLOWED: ONE CONCERNED WITH TEMPORAL FACTORS AND THE OTHER RELATING TO CONTEXTUAL VARIABLES. THE DATA FROM THESE STUDIES WILL BE INTEGRATED INTO A MORE COMPREHENSIVE DESCRIPTION OF FUNCTIONAL LEARNING DISORDERS ASSOCIATED WITH MENTAL RETARDATION. ADDITION, BASIC INFORMATION WILL BE OBTAINED CONCERNING THE LEARNING AND RETENTION OF VERBAL MATERIAL BY NORMAL CHILDREN.

D210 VARIED REINFORCEMENT AND CONDITIONED REINFORCERS; HD-03859-02; STEINMAN, WARREN M.; UNIVERSITY OF ILLINOIS; URBANA, ILLINOIS; 1/70-12/70; CONTINUATION; $17,659, NICHD

THE PURPOSE OF THIS RESEARCH IS TO DISCOVER HOW THE REINFORCING PROPERTIES OF A STIMULUS ARE AFFECTED WHEN CHILDREN HAVE THE STIMULUS GENERALIZED TO THE ATTAINMENT OF A VARIETY OF REINFORCERS. SPECIFIC FORMS OF REINFORCEMENT VARIETY WILL BE MANIPULATED IN ORDER TO DETERMINE THE EFFECTS OF THE VARIOUS GENERALIZED CONDITIONED REINFORCEMENT. SUCH INFORMATION WOULD BE USEFUL TO THE UNDERSTANDING OF CONDITIONED REINFORCEMENT AND THE HANDICAPPED.

PREVENTION

E005 AUTOMATED MONITORING OF SICK INFANTS HD4138-02; VEASY, L. GEORGE, PRIMARY CHILDRENS HOSPITAL, SALT LAKE CITY, UTAH; 2/70-1/71 CONTINUATION; $42,684, NICHD

THE PURPOSE OF THIS PROJECT IS TO DEVELOP A METHOD OF ON-LINE COMPUTER DETERMINATION OF ARTERIAL BLOOD GAS, PH, AND ELECTROLYTES ON SICK INFANTS. THE DEVELOPMENT WILL BE CARRIED OUT IN THREE STEPS: (1) DEVELOPMENT OF A METHOD OF ON-LINE COMPUTER DETERMINATION OF ARTERIAL BLOOD GAS, PH, AND ELECTROLYTES, (2) CLINICAL APPLICATION OF THIS TECHNIQUE, AND (3) MODIFICATION OF SUCCESSFUL COMPUTERIZED MONITORING SYSTEMS. THE DEVICES WILL BE USED IN INFANT HOSPITALS.

E015 DIAGNOSTIC-HERPETOLOGICAL STUDIES OF HIGH-RISK PREGNANCY H-492; STONE, MARTIN L., NEW YORK MEDICAL COLLEGE, NEW YORK, N.Y., 7/70-6/30/71 CONTINUATION; $191,843, HSMH-MCHS

THIS RESEARCH PROPOSES TO APPLY CERTAIN BIOCHEMICAL AND ENDOCRINE STUDIES TO HIGH-RISK PREGNANCY. THE PRIMARY GOALS ARE TO STUDY THE EFFECTS OF CERTAIN BIOCHEMICAL AND ENDOCRINE STUDIES, PROPHYLACTICALLY, ON A SPECIFIC GROUP OF 'HIGH-RISK' PREGNANT WOMEN (GRANDA 56 YEARS OF AGE OR YOUNGER).

E025 PREVENTION OF BLERIBIN ENCEPHALOPATHY IN THE NEWBORN; HD-04589-01; AMITAI, NABIOH, UNIVERSITY OF SOUTHERN CALIFORNIA; SEATTLE, WASHINGTON; 11/69-10/70; INITIAL; $11,677; NICHD

THIS RESEARCH IS DIRECTED TO EVALUATING POSSIBLE DELETERIOUS EFFECTS OF PHOTOTHERAPY IN PREVENTING HYPERBILIRUBINEMIA. PHOTOCONVERSION PRODUCTS OF BLERIBIN FOLLOWING PHOTOTHERAPY WILL BE EVALUATED IN TERMS OF THEIR THERAPEUTIC EFFECTS ON SICK INFANTS CLINICALLY USEFUL TESTS FOR MEASUREMENT OF BILIRUBIN-BILIRUBIN BINDING CAPACITY ARE ALSO BEING DEVELOPED.

E030 PREVENTION OF HEMOLYTIC DISEASE OF THE NEWBORN HD-01955-03; GORMAN JOHN O., NEW YORK, ALABAMA; 2/70-1/71 CONTINUATION; $13,037, NICHD

THIS RESEARCH INVOLVES THE RH IMMUNOGLOBULIN IGG PREPARED FROM HIGH TITERED ANTI-RH ANTIBODY PREPARED FROM HIGH TITERED ANTI-RH ANTIBODY ANALYSIS. EXPRESSION OF RH IMMUNOGLOBULIN IN PREVENTING SENSITIZATION OF RH NEGATIVE MOTHERS AT RISK IS UNDERWAY.
AMELIORATION

A CURRICULUM CENTER IN SOCIAL LEARNING FOR RETARDATES WITH COMMUNICATION COGNITIVE FUNCTIONS OF RETARDED EARLY REMEDIATION OF DISTURBED AND RETARDED GEEL BELGIUM FOSTER FAMILY CARE RESEARCH AMELIORATION - EDUCATION TRAINING AND EXPERIENCE AND ON CURRENT PROFESSIONAL TRAINING CHILDREN AGED 2 AND 3 UPON SUBSEQUENT PER­ THIS RESEARCH PROPOSES TO DETERMINE THE EFFECTS OF SPECIAL TEACHERS OF THE EDUCABLE MENTALLY RETARDED. THIS RESEARCH CONCERNS A CENTER TO DEVELOP AND PRO­ TIONS IN PREDICTING REDEVELOPMENT OF COGNITIVE FUNC­ ADOLESCENTS IN AN ATTEMPT TO ASCERTAIN THE EXTENT OF EDUCATIONALLY RETARDED, DISADVANTAGED ISRAELI UNDER SPECIFIED STIMULUS CONDITIONS IN A POPULATION OF IDENTIFIED AS MILDLY AND MODERATELY RETARDED DURING THEIR SCHOOL YEARS TO ENTER ADULT LIFE AS NONRE- SUCCESSFULLY MOVE THROUGH SCHOOL WITHOUT BEING COORDINATE A VARIETY OF RESEARCH AND DEVELOPMENT EF­ ACTIVITIES. INTEGRAL TO THE PROJECT'S OPERATION WILL BE TRAINING THROUGH DEMONSTRATION AND DISSEMINATION OF TECHNIQUES. AMELIORATION - EDUCATION

AN EXPERIMENTAL STUDY TO DETERMINE THE INFLUENCE OF TYPEWRITING ON SELECTED LANGUAGE ARTS SKILLS AND MOTOR DEVELOPMENT OF THE EDUCABLE MENTALLY HANDICAPPED, OEG-0-70-2568-(041), RAIKIC, G. LAWRENCE UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA, 3/10-70/1-31/72, INITIAL $174,849, OE

THE PURPOSE OF THE PROPOSED RESEARCH PROJECT IS TO DETERMINE THE FACTOR STRUCTURE OF MOTOR ABILITIES OF EDUCABLE MENTALLY RETARDED CHILDREN AND TO ASSESS HOW SIGNIFICANT THESE FACTORS ARE IN THE LEARNING OF MOTOR SKILLS. THE INVESTIGATION WILL ALSO SEEK TO DETERMINE IF THE BASIC COMPONENTS AS IDENTIFIED IN THE FACTOR ANALYSIS ARE IMPORTANT IN THE ACQUISITION OF PARTICULAR SKILLS FROM THE RESULTS OF THE INITIAL ANALYSES AND THE EXPERIMENTAL WORK, CONSIDERABLE INSIGHTS WILL BE OBTAINED REGARDING THE NATURE OF MOTOR ABILITIES AND MOTOR SKILL LEARNING IN THE RETARDED.

G070 BENNINGTON COUNTY DAY PROGRAM FOR PRE-SCHOOL MENTALLY RETARDED CHILDREN FORMAN, W.F. BENNINGTON SCHOOL, OEG-0-8482-3323 BENNINGTON, VERMONT, 3/1/69-7/31/70, CONTINUATION $12,500, OE

THE PURPOSE OF THIS PROPOSAL IS TO EVALUATE THE EFFECTS OF AN INTEGRATED PHYSICAL EDUCATION AND EXERCISE PROGRAM ON THE DEVELOPMENT OF THE EDUCABLE MENTALLY HANDICAPPED CHILDREN. THE PROGRAM WILL CONCENTRATE ON STRENGTH DEVELOPMENT, MOTOR SKILLS, AND SELF-HELP TRAINING IN A GENERAL PROGRAM OF SCHOOL READINESS TRAINING.

RESEARCH AND DEMONSTRATION GRANTS, 1970

G046 AN EXPERIMENTAL STUDY TO DETERMINE THE INFLUENCE OF TYPEWRITING ON SELECTED LANGUAGE ARTS SKILLS AND MOTOR DEVELOPMENT OF THE EDUCABLE MENTALLY HANDICAPPED, OEG-0-70-1220, ROWE, JOHN L. UNIVERSITY OF NORTH DAKOTA, GRAND FORKS, NORTH DAKOTA, 3/1/69-7/31/70, INITIAL $30,478, OE

THIS STUDY WILL ATTEMPT TO DETERMINE THE INFLUENCE OF TYPEWRITING ON THE ACADEMIC ACHIEVEMENT OF THE EDUCABLE MENTALLY HANDICAPPED IN READING, VOCABULARY DEVELOPMENT, SPELling, AND ON MOTOR DEVELOPMENT. APPROXIMATELY 30 PUPILS WILL BE IN THE EXPERIMENTAL GROUP AND 30 PUPILS IN THE CONTROL GROUP. SUBJECTS IN THE EXPERIMENTAL GROUP WILL RECEIVE 100 LESSONS IN SELECTED LANGUAGE ARTS THROUGH THE USE OF THE TYPEWRITER. THE CONTROL GROUP WILL RECEIVE THE SAME AMOUNT OF BOTH PRELIMINARY TYPEWRITING INSTRUCTION AND LANGUAGE ARTS INSTRUCTION. IT IS ANTICIPATED THAT THE FINDINGS OF THIS STUDY WILL PROVIDE A BASIS FOR FUTURE PROGRAMS OF TYPEWRITING FOR THE EDUCABLE MENTALLY HANDICAPPED TO ENHANCE THEIR LEARNING PROCESS AND THEIR MOTOR DEVELOPMENT.

G050 AN INSTRUCTIONAL CURRICULUM FOR THE EDUCABLE MENTALLY RETARDED CHILDREN OEG-0-9-1424-105-2444 ROSS, SHIELA A AND ROSS DOROTHEA M PALO ALTO MEDICAL RESEARCH FOUNDATION PALO ALTO CALIFORNIA 9/1/69-12/31/71 CONTINUATION $170,349, OE

THE OBJECTIVES OF THIS PROJECT ARE (1) TO PREPARE AN INSTRUCTIONAL CURRICULUM WITH EMPHASIS ON THE ACQUISITION OF SKILLS AND THE SPECIFIC SUBJECT MATER AND SOCIAL SKILLS AND (2) TO TEST THE HYPOTHESIS THAT THIS CURRICULUM CAN RESULT IN SIGNIFICANT PROGRESS IN THE LEARNING OF THE RETARDED CHILD.


THIS RESEARCH WILL INVESTIGATE SOME OF THE VARIABLES AND LEARNING TASKS RELEVANT TO THE DESIGN OF INSTRUCTIONAL MATERIALS. THE EFFECTIVENESS OF PROMPTING VS. CONFIRMATION, AS A TRAINING PROCEDURE WILL BE EXAMINED. THE PROJECT WILL DEVELOP VARIOUS INSTRUCTIONAL MATERIALS BASED ON THE RESEARCH RESULTS.

G065 AUDITORY PERCEPTUAL ABILITY RELATED TO LANGUAGE ACQUISITION IN MENTALLY RETARDED CHILDREN OEG-0-8-001242-1797 GRAMHAM, JAMES T. EMORY UNIVERSITY, ATLANTA, GEORGIA, 9/1/67-8/31/71, CONTINUATION $114,962, OE

THE OBJECTIVES OF THIS PROJECT ARE (1) TO INVESTIGATE THE RELATIONSHIP OF THE DATA, RELATED TO AUDITORY PERCEPTION AND LANGUAGE ACQUISITION IN THE MENTALLY RETARDED, THAT ARE REQUIRED FOR THE GENERATION OF MODELS OF LANGUAGE STIMULATION AND THERAPY PROGRAMS.

G066 BASIC COMPONENTS IN THE MOTOR PERFORMANCE AND THE MOTOR LEARNING OF EDUCABLE RETARDED: IMPLICATIONS FOR CURRICULUM, OEG-0-70-2568-(041), RAIKIC, G. LAWRENCE UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA, 3/1/70-1/31/72, INITIAL $174,849, OE

THE PURPOSE OF THE PROPOSED RESEARCH PROJECT IS TO DETERMINE THE FACTOR STRUCTURE OF MOTOR ABILITIES OF EDUCABLE MENTALLY RETARDED CHILDREN AND TO ASSESS HOW SIGNIFICANT THESE FACTORS ARE IN THE LEARNING OF MOTOR SKILLS. THE INVESTIGATION WILL ALSO SEEK TO DETERMINE IF THE BASIC COMPONENTS AS IDENTIFIED IN THE FACTOR ANALYSIS ARE IMPORTANT IN THE ACQUISITION OF PARTICULAR SKILLS FROM THE RESULTS OF THE INITIAL ANALYSES AND THE EXPERIMENTAL WORK, CONSIDERABLE INSIGHTS WILL BE OBTAINED REGARDING THE NATURE OF MOTOR ABILITIES AND MOTOR SKILL LEARNING IN THE RETARDED.

G070 BENNINGTON COUNTY DAY PROGRAM FOR PRE-SCHOOL MENTALLY RETARDED CHILDREN FORMAN, W.F. BENNINGTON SCHOOL, OEG-0-8482-3323 BENNINGTON, VERMONT, 3/1/69-7/31/70, CONTINUATION $12,500, OE

THE PURPOSE OF THIS PROPOSAL IS TO EVALUATE, A DAY CARE PROGRAM FOR MENTALLY RETARDED CHILDREN. THE PROGRAM WILL CONCENTRATE ON STRENGTH DEVELOPMENT, MOTOR SKILLS, AND SELF-HELP TRAINING IN A GENERAL PROGRAM OF SCHOOL READINESS TRAINING.

G080 CLASSICAL CONDITIONING IN RETARDES AND NORMALS EH-10-235-06, ROSS, LEONARD E., UNIVERSITY OF WISCONSIN, MADISON, WISCONSIN, 9/1/69-8/31/70, INITIAL, $3,977, OE

THIS RESEARCH USES CLASSICAL CONDITIONING TO INVESTIGATE BASIC LEARNING PROCESSES IN NORMAL AND RETARDED CHILDREN. PARAMETERS OF INTEREST INCLUDE CS CS INTERRELATIONS, REINFORCEMENT EFFECTS, STIMULUS PARAMETERS AND INHIBITION PHENOMENA.

G081 CLUSTERING AND SUBJECTIVE ORGANIZATION IN A FREE-RECALL TASK WITH RETARDES: A COMPARISON OF TWO METHODS, OEG-0-70-2568-(041), REISS, PHIILIP, STATE UNIVERSITY OF NEW YORK STATE UNIVERSITY COLLEGE, BUFFALO, NEW YORK 10/30-70-8/2/71, INITIAL, $3,977, OE

THIS STUDY WILL ATTEMPT TO EVALUATE THE DEGREES TO WHICH CLUSTERING MAY BE FACILITATED BY A PRECEDING SORTING TASK AND THE EFFECTS OF LIST ORGANIZATION. IT IS HYPOTHEZTED THAT THE ORGANIZED LIST PRESENTATION WILL FACILITATE CLUSTERING AND RECALL AND THAT THESE WILL BE CORRELATED.

G100 DETERMINING CRITERIA FOR ASSESSMENT AND REMEDIATION OF MENTALLY RETARDED HANDICAPPED MENTALLY RETARDED AND MULTI-HANDICAPPED PUPILS OEG-0-9-14270-3463 CARR, DOROTHY S. LOS ANGELES CITY SCHOOLS LOS ANGELES CALIFORNIA 04/28/69-12/27/70 CONTINUATION $187,645, OE

THE PURPOSE IS TO DEVELOP AND FIELD TEST DEVELOPMENTAL, PHYSICAL SKILLS OF TRAINABLE MENTALLY RETARDED AND MULTI-HANDICAPPED PUPILS FROM PRE-SCHOOL THROUGH HIGH SCHOOL.

G106 EFFECTS OF CONTINGENT MUSIC ON RETARDED CHILDREN'S PERFORMANCE IN ADDITION PROBLEMS, OEG-0-70-1198, COTTER, VANCE W., UNIVERSITY OF KANSAS, LAWRENCE, KANSAS, 9/1/69-9/1/70, INITIAL, $31,458, OE

THE PURPOSE OF THE PRESENT PROJECT IS TO INVESTIGATE THE EFFECTS OF CONTINGENT MUSIC ON PERFORMANCE OF RETARDED CHILDREN. THE PROSECT ADDRESSES ITSELF TO THE QUESTIONS: (1) DOES CONTINGENT MUSIC AFFECT ACADEMIC PERFORMANCE DIFFERENTLY THAN SILENCE? (2) DOES MUSIC AFFECT ACADEMIC PERFORMANCE DIFFERENTLY THAN CONTINGENT NONMUSICAL SOUNDS? (3) DOES CONTINGENT MUSIC AFFECT ACADEMIC PERFORMANCE DIFFERENTLY THAN CONTINGENT NONMUSICAL SOUNDS? (4) DOES MUSIC ON ACADEMIC PERFORMANCE DIMINISH OVER TIME? THREE EXPERIMENTS HAVE BEEN DESIGNED TO ANSWER THESE QUESTIONS. ALL THREE EXPERIMENTS ALLOW FOR THE EVALUATION OF THE EFFECTS OF CONTINGENT MUSIC ON ACADEMIC PERFORMANCE.

G107 ENHANCEMENT OF PRODUCTIVE THINKING IN INSTITUTIONALIZED MENTAL RETARDES OEG-2-700017, LADNER, JUDITH, FORDHAM UNIVERSITY, BRONX, NEW YORK, 3/1/70-2/28/71, INITIAL, $2,469, OE

THE PURPOSE OF THE PROPOSED RESEARCH IS TO EVALUATE THE EFFECTIVENESS OF A PROGRAM BASED ON BRAINSTORMING WHICH IS TO BE ADDED TO THE CURRICULUM OF EDUCABLE MENTALLY RETARDED (EMR) SUBJECTS IN ORDER TO INCREASE THEIR PROBLEM-THINKING ABILITIES. NINETY TEENAGE AND YOUNG ADULT INSTITUTIONALIZED EMR STUDENTS WILL BE INVOLVED IN THE EXPERIMENT. THE EXPERIMENTAL GROUPS TO BE FOLLOWED ARE: (1) PRETESTING 6 INTACT CLASSES OF EMR SUBJECTS WITH THE PROBLEM-THINKING TEST, (2) TEACHING 6 CLASSES OF EMR STUDENTS WITH THE PRECEDING TECHNIQUE TO EVALUATE THE EFFECTIVENESS OF A PROGRAM FOR THE ENHANCEMENT OF PROBLEM-THINKING ABILITIES, AND (3) TESTING ALL SUBJECTS WITH THE TORRANCE TESTS OF CREATIVE THINKING.

G108 EVALUATING AN INTEGRATED APPROACH TO THE MANAGEMENT OF CEREBRAL PALSY OEG-0-9-59149-4548 HOUSE JAMES W., EMARY CLAUD WISCONSIN 6/30/70-7/31/70, INITIAL, $3,977, OE

THE PURPOSE OF THIS PROPOSAL IS TO EVALUATE THE EFFECTS OF AN INTEGRATED EDUCATIONAL APPROACH TO CEREBRAL PALSY PATTERED AFTER THE
G115 FACILITATION OF COGNITIVE DEVELOPMENT AMONG CHILDREN WITH LEARNING DEFICITS OEG-0-8-08054-2694, BURGARELLA, ROSARIA, CALIFORNIA STATE COLLEGE, SAN LUIS BENANGO, CALIFORNIA, 2/168-1/3171, CONTINUATION $74,568 OE

This research will diagnose specific learning deficits, design materials and procedures, and test these materials with controlled groups of mentally retarded and normal children to determine their effectiveness as aids to cognitive development.

G125 INTERPERSONAL ASPECTS OF CHILD CEREBRAL PALSY THERAPY, NS-85-3-01, KOGAN, KATEL, UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON, 10/69-9/70, INITIAL $23,721 NINDS

Interpersonal therapy aspects between cerebral palisé children and their mothers through observation, recording, and analysis of their interaction at the beginning of the school year, 9 months later and over a span of three years.

G124 MOBILE RECREATION AND PHYSICAL EDUCATION UNIT OEG-0-8-9-32215-4509 BURGARELLA, ROSARIA, CALIFORNIA STATE COLLEGE, SAN LUIS BENANGO, CALIFORNIA, 2/168-1/3171, CONTINUATION $74,568 OE

This project is designed to facilitate academic achievement in mentally retarded children grades 2-5. The major objective is to initiate an experimental, individualized instructional program for the mentally retarded child who is exposed to graded instructional experiences at his level of skill development and instruct him toward acquisition of regular classroom placement with math and reading skills commensurate with his own grade level. The project will introduce an experimental treatment over a two-year period which incorporates principles of instruction and procedures of errorless learning into a systematic instructional program.

G130 LEARNING POTENTIAL AND EDUCABILITY AMONG THE EDUCABLY MENTALLY RETARDED OEG-0-8-09030-4597 BUDOFF, MILTON, CAMBRIDGE MENTAL ASSOCIATION CAMBRIDGE, MASS, 6/1/66-6/1/71 CONTINUATION $286,566 OE

This research will focus on discriminating among the subgroups within the non-gainer category and seek a criteria by which to identify these children within the context of the learning potential approach. Two hypotheses will be examined to explain the unresponsiveness of non-gainers.

G140 MOBILE RECREATION AND PHYSICAL EDUCATION UNIT OEG-0-9-2-22707-4235 MARSHALL, WAYNE, KETTERING ORGANIZATION FOR RETARDED CHILDREN FRANKFORT, KY 6/1669-6/1571 CONTINUATION $74,295 OE

The mobile recreation and physical education unit will be a four-wheel, van-type vehicle and staff that will comprise a self-contained dissemination device in a point and center for the mentally retarded programs will be designed to offer the latest information in techniques and materials to ongoing programs for all levels of personnel. Special programs will be provided to be presented to high school and college students in an effort to interest young people in careers in physical education for the mentally retarded.

G141 MOTIVATION AND EXPERIENCE THEORY MH-11321-05 HUNT, J. MCVICKER, UNIVERSITY OF ILLINOIS, URBANA, ILLINOIS, 5/170-4/3171, RENEWAL $12,827 NIMH

The investigator is focusing on the problem of cultural deprivation of children reared in orphanages. He is also developing scales for assessing infant psychological development.


This program will identify and develop in individualized curricular materials which when used by EMR's will increase their learning functioning. A central staff will work with two teachers. Two teachers will utilize the students' peers and families to develop specific performance objectives for two classes of EMR's.

G140 RETARDED AND EMOTIONALLY DISTURBED PRE-SCHOOL CHILDREN OEG-0-8-223030-0762 BLOD, SIDNEY W UNIVERSITY OF ILLINOIS URBANA ILLINOIS 9/162-8-3171 CONTINUATION $229,768 OE

The general aim is to apply operant learning principles to the development of procedures and materials for retarded and emotionally disturbed pre-school children. Specific objectives include (1) refine and explain the steps required to weaken disruptive school behaviors and to strengthen prerequisite academic behaviors; (2) refine the programmed instructional materials and procedures in academic readiness and in reading, writing and arithmetic; (3) refine the procedures for training parents to extend into the home the practices of the nursery school.

G145 SENSORY-PERCEPTUAL LANGUAGE TRAINING TO PREVENT SCHOOL LEARNING DISABILITIES IN CULTURALLY DEPRIVED PRESCHOOL CHILDREN OEG-32-52-7900-5025, MCCONNEL, FREEMAN, THE BILL WILKINSON HEARING AND SPEECH CENTER, NASHVILLE, TENN, 6/1/65-7/3170 CONTINUATION, $74,198 OE

This research focuses upon an organized, structured, and intensive perceptual and language stimulation program for preschool children directed at the prevention of learning disabilities, the failure to achieve, and the subsequent school dropout.

G146 THE DEVELOPMENT OF CULTURALLY DEPRIVED CHILDREN OEG-0-9-142710-4449 CRATTY, BRYANT J UNIVERSITY OF CALIF LOS ANGELES CALIFORNIA 6/1/69-6/1/70 CONTINUATION $120,863 NICHD

This research proposes to study the developmental functions of culturally deprived children. Five general areas of study are: factors of early development; pre-school intervention; achievement motivation; community problems; training activities.

G147 THE EFFECT OF A PROGRAM OF GROSS BODY MOVEMENT UPON SELECTED ABILITIES OF RETARDED CHILDREN OEG-0-9-142710-4449 CRYSTY, BRYANT J UNIVERSITY OF CALIF LOS ANGELES CALIFORNIA 6/1/69-6/1/70 CONTINUATION $174,649 OE

The purpose is to explore the manner in which a program incorporating total body movement adds to and builds upon the learning of retarded children to better function in selected academic pursuits.

G150 THE MEASUREMENT AND COMPARISON OF VARIABLES RELATED TO DRIVE HIGHWAY SAFETY BETWEEN EDUCABLE MENTALLY RETARDED AND NORMAL HIGH SCHOOL AGE PUPILS IN PENNSYLVANIA OEG-0-9-48206-1362 KETTERING, W. RICHARD AND MULIN RAYMOND C. MILLERSVILLE STATE COLLEGE, MILLERSVILLE, PA 1/1/69-12/3070 CONTINUATION $74,956 OE

To measure those variables which are related to safe driving in the following comparison groups: 400 EMR's compared with 400 normal persons. EMR's and normal persons who have not been involved in accidents compared with EMR's and normal persons who have not been involved in accidents; to develop an instrument that measures situational stress to formulate a battery of specific variables which would indicate a person's potential success as a safe driver; these are the objectives of this research.

G201 WHO ARE THE RETARDED MULTIPLE CRITERIA APPLIED TO CHILDREN IN EDUCABLE CLASSES OEG-0-7-22406-0607, GARRISON, MORTIMER, JR., AND HAMMILL, DONALD D., TEMPLE UNIVERSITY, PHILADELPHIA, PENNSYLVANIA, 1/170-8/3171, INITIAL $33,987 OE

Methods developed by the Hungarian neurologist-educator, ANDREAS, that all treatment and teaching is performed by one type of professional person. Treatment will be done with 20 severely involved athetoid children working and living as a group.
THE PURPOSE OF THIS STUDY IS TO COMPARE THE INTELLECTUAL, SOCIAL, EMOTIONAL, AND LANGUAGE CHARACTERISTICS OF CHILDREN PLACED IN EDUCABLE CLASSES WITH THEIR AGEMATES FROM THE SAME NEIGHBORHOODS IN THE SAME SCHOOL TO REGULAR CLASSES IN ORDER TO DETERMINE THE EXTENT TO WHICH MULTIPLE CRITERIA ARE EMPLOYED IN THE CLASS PLACEMENT OF MILDLY RETARDED (EDUCABLE) CHILDREN. A SAMPLE OF 450 ELEMENTARY CLASSES FOR EDUCABLE RETARDED CHILDREN IN THE GREATER PHILADELPHIA AREA WILL BE DRAWN. FOR EACH OF THESE SMP CHILDREN, A CHILD OF THE SAME AGE, ATTENDING THE SAME SCHOOL, FROM THE SAME NEIGHBORHOOD WILL BE SELECTED.


AMELIORATION - VOCATIONAL REHABILITATION

H010 ASSESSING OF WORK PERSONALITIES OF MENTALLY RETARDED ADULTS RD-2368-P, LLOYD H. LOFOQUIST, UNIVERSITY OF WISCONSIN, 7/1/69-6/30/70 CONTINUATION $46,447. SRS-ORD

This research is concerned with developing reliable measures of vocational abilities and occupational needs which can be administered meaningfully to retarded adults. Normative data will be obtained which will be of use to vocational rehabilitation counselors working with the retarded.

H015 COGNITIVE AND ATTitudINAL-MOTIVATIONAL FACTORS IN PERFORMANCE OF RETARDED NORMAN A. MILGRAM, RD-2569-P, CATHOLIC UNIVERSITY OF AMERICA, WASHINGTON, D.C. 8/1/69-7/1/70 CONTINUATION $43,956. SRS-ORD

Cognitive factors in retardates will be developed through their participation in a non-verbal training in logic course. Verbal and non-verbal techniques to assess attitudinal-motivational variables that affect optimal use of cognitive abilities will be devised.

H020 COGNITIVE DEVELOPMENT IN CHILDREN WITH BRAIN DAMAGE BORTNER, MORTON, YOSEMITE UNIVERSITY, new york, N.Y. 2/1/69-2/28/71, RENEWAL $93,107. OE

This research will seek information on an age-specific definition of the structure of intellect, description of the patterning of growth of intellect, and description of the relationships of patterns of growth and intellectual ability to academic achievement in brain damaged children.

H025 COMMUNITY ORGANIZATION ACTION PLAN FOR THE MENTALLY RETARDED RD-1929-G, TITUS, GARY, COORDINATING COUNCIL ON MENTAL RETARDATION, SAN FRANCISCO, CALIFORNIA, 11/1/65-10/31/70 CONTINUATION $93,600. SRS-ORD

This research proposes to initiate action on needed services to increase utilization of all services and to provide channels for effective coordination of the development of new and expanded programs to insure the wise use of money and manpower for maximum service.

H030 COMPARATIVE EFFORTS IN COMMUNITY ORGANIZATION: A STUDY OF FIVE INTER-ORGANIZATIONAL COMPARATIVE PROJECTS RD-3079-G, HAGENBERG, M.D., UNIVERSITY OF WISCONSIN, MADISON, WIS. 5/1/69-6/30/71 CONTINUATION $45,790. SRS-ORD

A comparative study of five large community organization programs serving the retarded.

H035 COMPREHENSIVE COMMUNITY-BASED SERVICES FOR THE RETARDED RD-10300-J, ORACK, LOUIS, PROGRAMS AND FRIENDS OF MENTALLY RETARDED CHILDREN OF BRIDGEPORT, INC., BRIDGEPORT, CONNECTICUT, 11/1/69-10/31/69 RENEWAL, $91,949. SRS-ORD

This research proposes to develop a model of comprehensive services based on the resources of the community and to show that such community-based services are the logical and most effective way of serving the changing needs of the individual retardate.

H037 CONFERENCE ON VOCATIONAL REHABILITATION OF THE RETARDED RD-1250-L, KAY, DOLORES, AMERICAN ASSOCIATION ON MENTAL DEFICIENCY, WASHINGTON, D.C. RD-3852-RU, 6/1/70-7/31/71 INITIAL $60,000, SRS-ORD

A conference to provide a forum for the international exchange of results bearing on the vocational rehabilitation of the retarded.

H040 GREATER CLEVELAND MENTAL RETARDATION DEVELOPMENT PROJECT RD-2056-G, BUCKMAN, RILMA OXLEY, WELFARE FEDERATION OF CLEVELAND, CLEVELAND, OHIO, 1/1/70-12/31/70 CONTINUATION $15,955. SRS-ORD

This research concerns the establishment of a fixed point of information about mental retardation services (systematic reviews, comparisons under which mental retardation might be used in a community rehabilitation program, training materials and media applicable to vocational training, and exhibitions under which such methods and media might be produced centrally for general use in rehabilitation programs.

H050 INDUSTRIAL TRAINING RESOURCES IN REHABILITATION PROGRAMS FOR RETARDATES RD-2197-G, BOLONOVOIC, DANIEL J., JEWISH EMPLOYMENT AND VOCATIONAL SERVICES, ST. LOUIS, MISSOURI, 8/1/69-7/31/70 CONTINUATION $3,546. SRS-ORD

This research focuses upon current industrial training applicable to rehabilitation projects for retardates such as employer facilities, equipment, and operational procedures, comparisons under which those might be used in a community rehabilitation program, training materials and media applicable to vocational training, and exhibitions under which such methods and media might be produced centrally for general use in rehabilitation programs.

H055 INTER-DISTRICT SCHOOL REHABILITATION PROGRAM FOR LESS ABLE RETARDED ADOLESCENTS RD.1810, HENZE, RICHARD D., EDUCA TIONAL RESEARCH AND DEVELOPMENT COUNCIL, MINNEAPOLIS, MINN., 7/1/69-6/30/70 CONTINUATION $56,810. SRS-ORD

This research concerns ways by which a comprehensive school rehabilitation program for less able mentally retarded can be established through the intermediate unit concept in educational administration and extended to include coordination with the vocational rehabilitation and special education and the department of public welfare.

H065 NEW APPROACHES TO COMPETITIVE EMPLOYMENT FOR THE MENTALLY RETARDED RD-2686-G, MARVIN BLANK, PLAME OF HOPE, HYANNIS PORT, MASS., 11/17/70-12/31/71 CONTINUATION $96,000. SRS-ORD

This project proposes to develop a central marketing organization to assist., sheltered workshops in marketing products manufactured by mentally retarded workers, a central service for the development, design and marketing of saleable items manufactured by the mentally retarded will be developed.

H070 READING-FREE VOCATIONAL INTEREST INVENTORY BECKER, RALPH L., OHIO UNIVERSITY MENTAL RETARDATION, COLUMBUS, OHIO, 6/24/68-7/13/71 RENEWAL, $26,336. OE

This project will develop and test a reading-free vocational interest inventory for slow learners and young adult retardates enrolled in work-study and pre-vocational programs.
AMELIORATION - MEDICAL TREATMENT

1005 ALBUMIN BINDING CAPACITY AND KERNicterus NS-6499-03, BOGGS, THOMAS R., JR., PENNSYLVANIA HOSPITAL, PHILADELPHIA, PENNSYLVANIA, 2/69-1/70, CONTINUATION, $27,766, NINDS

This research proposes to begin a clinical trial of the use of albumin in the treatment of kernicterus in newborn infants. The null hypothesis to be tested is that albumin will reduce the incidence of kernicterus and its sequelae as compared to patients treated without albumin. The study will be conducted in a prospective, controlled, randomized fashion with appropriate statistical tests to ensure that any observed differences are due to albumin administration.

1020 DEVELOPMENT OF PREVOCATIONAL SKILLS IN TMR CHILDREN MR-07003-01, MORGAN, CECIL W., JOHN F. KENNEDY CENTER FOR RESEARCH ON EDUCATION & HUMAN DEVELOPMENT, GEORGE PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENNESSEE, 6/70-5/71, INITIAL, $21,137, SRS-DMR

To investigate and assess a systematic perceptual-motor training program for mentally retarded children, to utilize and test a combination of recently developed procedures and techniques in order to develop and evaluate a more efficient program which can be implemented with non-professional staff and operate at a lower cost.


This project is directed to the increasing problem of premature obsolescence of patient care facilities. The objective of the work is to make buildings for patient care more adaptable to the often rapidly changing demands, created by advances in medical techniques and equipment, improved hospital operation, and fluctuating social patterns. These demands are not easily met by the existing and currently employed building methods.

1030 EXOGENOUS ELEVATION OF SEROTONIN IN DOWN'S SYNDROME NS-6499-01, COLEMAN, MARY PORYLES, RESEARCH FOUNDATION OF CHILDRENS HOSPITAL, WASHINGTON, D.C., S/69-4/71, INITIAL, $182,958, NINDS

Patients with trisomic disease and other syndromes with severe retardation have shown a depression of whole blood serotonin (5-hydroxytryptamine) (5-HT). Evaluating the effects and techniques in order to maintain whole blood 5-HT in patients with trisomy 21, to relieve some of the symptoms of Down's disease since various enzymes and serotonin are somewhat decreased.

1035 HYPERACTIVITY IN CHILDREN HD-03578-01, SPARGUE, ROBERT L., UNIVERSITY OF ILLINOIS, URBANA, ILL., 6/70-5/71, RENEWAL, $37,061, NCHD

This project proposes to study the relationships between the use of medication and behavioral therapy in hyperactivity in exceptional children.

1036 IN VIVO EFFECTS OF HISTIDASE: HD-04531-01; BOGGS, DALLAS E., OHIO STATE UNIVERSITY, COLUMBUS, OHIO, 6/70-5/71, INITIAL, $12,359, NCHD

The major objective of this research is to investigate the possible use of the enzymes histidase and histidinase as therapeutic agents in the treatment of inborn errors of metabolism. Rats with simulated inborn errors will be used to study procedures for the use of the enzymes in vivo activity and the antigenicity of the enzymes will also be made.

1040 METABOLISM OF COPPER AND CALCIUM IN WILSON'S DISEASE, NS-3655-06, GOLDSMITH, N.P., MAYO ASSOCIATION, ROCHESTER, MINN., 1/69-6/70, RENEWAL, $365,000-08, NCHD

This research is concerned with the metabolic balance of copper and calcium in Wilson's disease and with the following varying diseases of copper: albinism, pellagra, and acrodermatitis of copper deficiency. Absorption, storage and excretion of copper and pellagra in the body will be studied. Absorption, storage and excretion of copper studied.

1045 MODE OF ACTION OF CONVULSIVE AGENTS, NS-6298-05, ALEXANDER, CHOLNOK, RESEARCH FOUNDATION FOR MENTAL HYGIENE, INC., NEW YORK, NEW YORK, 6/70-5/71, CONTINUATION, $16,865, NINDS

This research concerns the elucidation of chemical changes in the central nervous system wherever in the body associated with induction of convulsant seizures. To this end the effects of convulant chemicals in vitro will be studied and correlated with the effects of the same agents in subconvulsive doses in vivo.

OTHERS

1005 A COMMUNICATION SCIENCES RESEARCH PROGRAM, NS-6499-05, MOORE, PAUL, UNIVERSITY OF FLORIDA, GAINESVILLE, FLA., 2/70-1/71, CONTINUATION, $201,556, NINDS

This research proposes to develop an integrated program of research in communications sciences involving scientists of various disciplines to do research in a single program and laboratory facility.

1010 A PROGRAM OF CENTER RESEARCH, HD-03352-03, HEBER, RICK F., UNIVERSITY OF WISCONSIN, MADISON, WISCONSIN, 5/70-2/71, CONTINUATION, $201,556, NCHD

The Wisconsin Center on Mental Retardation directs its major efforts towards an interdisciplinary approach to biological and behavioral aspects of mental retardation in cooperation with the University of Wisconsin. The Center serves as a focal point for the integration of disciplines that have not collaborated. The availability of a diagnostic-trustamentation, the Central Wisconsin Colony and a school rehabilitation unit will assure a milieu in which a wide range of problems may be investigated.

1015 AIDING COGNITIVE GROWTH IN DISADVANTAGED PRESCHOOLERS R-300, LEVENSTEIN, PHYLLIS, FAMILY SERVICE ASSOCIATION OF NASSAU COUNTY, INC., MINEOLA, NEW YORK, 7/1/69-6/30/70, RENEWAL, $157,926, HSMHA-MCHS

The purpose of this research is to determine the effectiveness of early intervention in aiding cognitive growth for disadvantaged preschool children. The mother-child dyad will be included in the study in an experimental group and in a control group.

1020 BEHAVIORAL CLASSIFICATION OF NEUROLOGICAL PATIENTS, NS-3535-09, SIDMAN, MURRAY, MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MASS., 5/70-4/71, CONTINUATION, $90,558, NINDS

Research to develop techniques for generating and maintaining behavior in neurological patients including severely retarded children. Work on normal and abnormal child behavior development.

1021 CMR-CENTER-RESIDENTIAL-INSTITUTION RESEARCH PROGRAM; HD-04666-01, LABBE, ROBERT F., UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON, 6/70-5/71, INITIAL, $109,865, NICHD

The main objective of this proposal is the identification and operation of a research program concerned with basic laboratory and clinical research in mental retardation. A portion of the funds will be used to support several affiliated research projects dealing with inborn errors of metabolism and all related objectives in
DEVELOPMENT OF BRAIN ELECTRICAL ACTIVITY OF THE DEVELOPING HUMAN BRAIN DURING INFANCY AND TO RECORD THE FACTORS IN BRAIN ELECTRICAL AND CLINICAL DEVELOPMENT.

DEVELOPMENT OF MENTAL RETARDATEMENT. THE PRIMARY RESEARCH EMPHASIZES THE DISCIPLINES OF BIOCHEMISTRY AND GENETICS WITH PROCEDURES RANGING FROM BASIC LABORATORY TO CLINICAL IN NATURE.

CENTRAL GRANT FOR MENTAL RETARDATION, HD-05221-01; WARKANY, JOSEF; CHILDREN'S HOSPITAL RESEARCH FOUNDATION; CINCINNATI, OHIO; 6/70-5/71; INITIAL: $457,791; NICHD

THIS PROGRAM PROJECT IS CONCERNED WITH RESEARCH WHICH MAY ASSIST IN FINDING CAUSES AND MEANS OF PREVENTION OF MENTAL RETARDATION OR IN FINDING MEANS OF AMELIORATING THE EFFECTS OF MENTAL RETARDATION. SPECIFICALLY, THE MAJOR RESEARCH EMPHASIS IS IN THE AREAS OF TURXIC, PATHOLOGIC EMBRYOLOGY, FETAL PHARMACOLOGY AND NEUROPHYSIOLOGY. IN ADDITION, EFFORT IS BEING DIRECTED TOWARD THE FURTHER DEVELOPMENT OF A BEHAVIORAL SCIENCE DIVISION.

CENTER GRANT JFK CENTER-GEORGE PEABODY COLLEGE HD-04243-02; OBRIEN, DONOUGH; UNIVERSITY OF COLORADO, DENVER, COLORADO; 1/70-12/70; CONTINUATION: $72,179; NICHD

THE PURPOSE OF THIS PROJECT IS TO ESTABLISH A CENTER FOR RESEARCH IN MENTAL RETARDATION AND RELATED ASPECTS OF HUMAN DEVELOPMENT.

CENTER FOR NORMAL AND ABERRANT ADAPTIVE DEVELOPMENT, HD-07119-09; BIRCH, HERBERT G.; Yeshiva University, New York, New York, 10/69-6/70; CONTINUATION: $733,259; NICHD

THIS RESEARCH CONCERNS THE ANALYSIS OF PROCESSES UNDERLYING NORMAL AND ABERRANT BEHAVIORAL DEVELOPMENT. WE HAVE CONDUCTED EXPERIMENTAL, OBSERVATIONAL AND EPIDEMIOLOGIC INQUIRIES RELATING TO FACTORS AFFECTING NEUROLOGIC AND BEHAVIORAL DEVELOPMENT. CENTRAL TO ALL THE INVESTIGATIONS HAS BEEN THE ANALYSIS OF PERCEPTUAL DEVELOPMENT AND THE RELATION OF SUCH DEVELOPMENT TO THE ACQUISITION OF LEARNED SKILLS AND TO THE CONTROL OF ACTION.

DEVELOPMENT OF A DEMONSTRATION DAY CARE CENTER FOR YOUNG CHILDREN, HD-08561-04; LALLY, SYRACUSE UNIVERSITY, SYRACUSE, NEW YORK; 7/70-6/70; RENEWAL, $345,788; NICHD

THIS RESEARCH FOCUSES UPON CHILDREN 6 TO 24 MONTHS OF AGE WHOSE MOTHERS WORK. IT PROPOSES TO DETERMINE THE EFFECTS OF MOTHER'S WORK ON CHILD DEVELOPMENT AND TO THE CONTROL OF ACTION. THE MAJOR OBJECTIVE IS TO PROVIDE A SCIENTIFIC BASIS FOR UNDERSTANDING OF BIOLOGIC PROBLEMS WHICH RESULT IN MENTAL RETARDATION.

DEVELOPMENT OF COMPARABLE OBSTETRIC, GYNECOLOGIC AND INFANT TERMINOLOGY AND CLINICAL STATISTICS; H-169, HUGHES, EDWARD C.; AMERICAN COLLEGE OBSTETRICIANS AND GYNECOLOGISTS, CHICAGO, ILLINOIS; 8/170-7/71; CONTINUATION, $33,505; NICHD

THIS RESEARCH PROPOSES TO DEVELOP A STANDARD TERMINOLOGY IN OBSTETRICS AND GYNECOLOGY FOR INTERNATIONAL, NATIONAL AND LOCAL STATISTICAL ANALYSIS.

ENHANCEMENT OF RECREATION SERVICE TO DISABLED CHILDREN C-202; DORIS BERRYMAN, NEW YORK UNIVERSITY, NEW YORK, N.Y.; 7/170-6/70; CONTINUATION, $58,393; NICHD

NO ABSTRACT SUPPLIED EPILEPTIC STUDES OF CONGENITAL MALFORMATIONS; HD-08339-04; IRVON, IRVON; UNIVERSITIY OF MARYLAND, BALTIMORE, MARYLAND; 7/170-6/30/71; CONTINUATION, $266,024; NICHD

THIS RESEARCH CONCERNS THE PREPARATION OF EVALUATIVE REPORTS BASED UPON CURRENT DATA SUBMITTED BY THE CHILDREN'S BUREAU AND TO FURTHER DEVELOP PROTOCOLS FOR EVALUATION OF FAMILY PLANNING AND INFANT CARE SERVICES.

CENTRAL GRANT FOR MENTAL RETARDATION, HD-05221-01; WARKANY, JOSEF; CHILDREN'S HOSPITAL RESEARCH FOUNDATION; CINCINNATI, OHIO; 6/70-5/71; INITIAL: $457,791; NICHD

THE PURPOSE OF THE PROJECT IS TO ESTABLISH AN ORGANIZED PROGRAM OF RESEARCH AND TRAINING IN MENTAL RETARDATION AND RELATION AND RELATED ASPECTS OF HUMAN DEVELOPMENT. SOME OF THE SPECIFIC INTERESTS ARE INTELLECTUAL DEVELOPMENT, INDIVIDUAL DIFFERENCES AND SCHOOL LEARNING, NORMAL CHILD DEVELOPMENT, IMPAIRED FUNCTIONING IN CHILDREN WITH ACUTE BEHAVIORAL PROBLEMS, BIOBEHAVIORAL STUDIES, AND BASIC RESEARCH IN PSYCHOLOGY.

CENTER FOR RESEARCH IN MENTAL RETARDATION, HD-04243-02; OBRIEN, DONOUGH; UNIVERSITY OF COLORADO, DENVER, COLORADO; 1/70-12/70; CONTINUATION: $72,179; NICHD

THE PURPOSE OF THE PROJECT IS TO ESTABLISH A CENTER FOR RESEARCH IN MENTAL RETARDATION AND RELATED ASPECTS OF HUMAN DEVELOPMENT.

CENTER FOR NORMAL AND ABERRANT ADAPTIVE DEVELOPMENT, HD-07119-09; BIRCH, HERBERT G.; Yeshiva University, New York, New York, 10/69-6/70; CONTINUATION: $733,259; NICHD

THIS RESEARCH CONCERNS THE ANALYSIS OF PROCESSES UNDERLYING NORMAL AND ABERRANT BEHAVIORAL DEVELOPMENT. WE HAVE CONDUCTED EXPERIMENTAL, OBSERVATIONAL AND EPIDEMIOLOGIC INQUIRIES RELATING TO FACTORS AFFECTING NEUROLOGIC AND BEHAVIORAL DEVELOPMENT. CENTRAL TO ALL THE INVESTIGATIONS HAS BEEN THE ANALYSIS OF PERCEPTUAL DEVELOPMENT AND THE RELATIONSHIP OF SUCH DEVELOPMENT TO THE ACQUISITION OF LEARNED SKILLS AND TO THE CONTROL OF ACTION.

DEVELOPMENT OF A DEMONSTRATION DAY CARE CENTER FOR YOUNG CHILDREN, HD-08561-04; LALLY, SYRACUSE UNIVERSITY, SYRACUSE, NEW YORK; 7/70-6/70; RENEWAL, $345,788; NICHD

THIS RESEARCH FOCUSES UPON CHILDREN 6 TO 24 MONTHS OF AGE WHOSE MOTHERS WORK. IT PROPOSES TO DETERMINE THE EFFECTS OF MOTHER'S WORK ON CHILD DEVELOPMENT AND TO THE CONTROL OF ACTION. THE MAJOR OBJECTIVE IS TO PROVIDE A SCIENTIFIC BASIS FOR UNDERSTANDING OF BIOLOGIC PROBLEMS WHICH RESULT IN MENTAL RETARDATION.
RESEARCH AND DEMONSTRATION GRANTS, 1970

J100 INTENSIFICATION OF RESEARCH IN MENTAL RETARDATION HD 02553-04 WARKANY, JOSEF, CHILDRENS HOSPITAL, RESEARCH FDN., CINCINNATI, OHIO, 9/69-5/70 RENEWAL $150,000. NICHD

THE PROJECT INVOLES FUNDS FOR A PERIOD BEFORE CERTAIN BUILDINGS ARE READY FOR OCCUPANCY AND FOR FUNDS TO MAKE POSSIBLE ADDITIONAL INVESTIGATIONS IN MENTAL RETARDATION. THE OBJECTIVE IS TO PROVIDE A SCIENTIFIC AND CLINICAL BASE FOR THE FUTURE DEVELOPMENT OF NEW RESEARCH AND THE MANAGEMENT OF THE CLINICAL COURSE.

J110 LAW, MENTAL DISORDER AND JUVENILE PROCESSES PR-180 SAMUEL DASH RESEARCH FOUNDATION OF THE BARRISTER'S ASSOCIATION OF THE DISTRICT OF COLUMBIA, WASHINGTON, D.C., 7/1/69-5/30/70, RENEWAL $103,236 HSMHA-MCHS

THIS RESEARCH IS CONCERNED WITH THE POWERS AND PROCEDURES OF THE JUVENILE COURT FOR GAINING ACCESS TO REHABILITATION FACILITIES NECESSARY FOR THE APPROPRIATE TREATMENT AND CARE OF MENTALLY DISOR­DERED JUVENILE DELINQUENTS.

J115 LONGITUDINAL STUDY OF EEG PATTERNS IN CHILDREN, T. E. FERNANDO, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINN., 9/69-5/70, RENEWAL, $77,734, NICHD

THIS RESEARCH CONCERN THE PERFORMANCE OF CONCURRE­NT EEG AND CLINICAL STUDIES ON SELECTED CHILDREN WHO HAVE HAD EEG AT BIRTH AND WHO NOW HAVE REACHED DIFFERENT AGES. PROGNOSTIC VALUE OF EEG WILL BE TESTED BY COMPARING EARLY ELECTRICAL ABNORMALITIES WITH THE CLINICAL COURSE.

J119 MENTAL RETARDATION CLINICAL RESEARCH CENTER,
(1) HD-00370-0752, (2) HD-00370-08A3, KEGEL, ROBERT, UNIVERSITY OF NEBRASKA, OMAHA, NEBRASKA, (1) $765,570, (2) 470-371, RENEWAL (1) $15,000, (2) $30,000, NICHD

THIS RESEARCH CONCERN PROVISION OF A FACILITY TO PROMOTE CLINICAL RESEARCH FOR DETERMINATION OF THE CAUSES, CLARIFICATION OF DIAGNOSIS, AND DEVELOPMENT OF MORE USEFUL TECHNICAL PROCEDURES AND PROCE­DURES FOR THE PREVENTION AND TREATMENT OF MENTAL RETARDATION, AND PROVISION OF A SETTING FOR TEACHING AND TRAINING OF PERTINENT DISCIPLINES AT THE UNDERGRADUATE, GRADUATE, AND POSTGRADUATE LEVELS.

J120 MENTAL RETARDATION RESEARCH CENTER, UCLA HD4612-02 TARJAN, GEORGE, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIFORNIA, 6/70-5/71 CONTINUATION $248,422, NICHD

THE MAIN OBJECTIVE OF THIS PROJECT IS TO PURSUE AN INTER­DISCIPLINARY RESEARCH PROGRAM AIMS TOWARDS SOLVING PROBLEMS IN THE FIELD OF MENTAL RETARDATION AND RELATED AREAS OF HUMAN DEVELOPMENT. BASIC BIOMEDICAL AND BEHAVIORAL RESEARCH WILL BE INCLUDED, AS WELL AS CLINICAL RESEARCH.

J121 MENTAL RETARDATION, BIOCHEMICAL AND GENETIC ASPECTS, HD-0516-01 KANDER, JULIAN N., E. K. SHRIVER CENTER FOR MENTAL RETARDATION INC., WALTHAM, MASSACHUSETTS, 6/70-5/71, INITIAL $300,230, NICHD

THIS PROGRAM PROJECT IS A MULTIDISCIPLINARY APPROACH TO THE BIOCHEMICAL AND GENETIC ASPECTS OF MENTAL RETARDATION INVOLVING THE DISCIPLINES OF BIOCHEMISTRY, GENETICS, NEUROLOGY, AND PEDIATRICS. A LARGE PORTION OF THE PROJECT INVOLVES A CLINICAL PROGRAM DESIGNED TO FURTHER THE KNOWLEDGE OF ETOLOGICAL PATHEGENETIC MECHANISMS AND TO IMPROVE METHODS OF DIAGNOSIS AND TREATMENT. A PROGRAM OF BASIC RESEARCH WILL ALSO BE INSTITUTED IN ORDER TO CLUCIDATE THE STRUCTURE, SUB-CELLULAR LOCALIZATION, AND METABOLISM OF BRAIN SPHINGOLIPIDS, STEROIDAL HORMONES, AND FATTY ACIDS.

J122 MENTAL RETARDATION RESEARCH PROGRAM IMPLEMENTATION HD3773-02 BARLOW, CHARLES F., CHILDRENS MEDICAL CENTER, BOSTON, MASS., 6/69-5/70 CONTINUATION $243,721, NICHD

THIS PROGRAM INCLUDES INVESTIGATION IN THREE MAJOR AREAS, A) GENETICS AND METABOLISM, B) NEUROSCIENCE, AND C) BEHAVIORAL SCIENCE, ALL CONVERGING ON A FOURTH AREA, CLINICAL STUDIES OF THE HUMAN SUBJECT. THE OBJECTIVE IS TO PROVIDE A SCIENTIFIC AND CLINICAL BASE FOR THE BETTER UNDERSTANDING OF THE FACTORS LEADING TO MENTAL RETARDATION, AND TO APPLY THIS INFORMATION TO PREVENTION OF THE DISORDER AND TO MANAGEMENT OF THE MENTALLY HANDICAPPED INDIVIDUAL.

J125 METABOLISM OF CORTICOSTEROIDS IN THE PREGNANT PRIMATE, HD-04684-01 BASHORE, RICHARD A., UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIFORNIA, 6/70-5/71, RENEWAL $155,000, NICHD

THE OBJECTIVES OF THIS PROJECT ARE TO CHARACTERIZE THE METABOLIC DISPOSITION OF CORTISOL, CORTICOSTERONE, AND ALDOSTERONE IN THE PRIMATE MOTHER AND FETUS. PLACENTAL TRANSFER RATES OF EACH STEROID FOLLOWING INJECTION INTO THE MATERNA OF FETAL CIRCULATION WILL BE DETERMINED. AN ADDITIONAL ATTEMPT WILL BE MADE TO IDENTIFY AND QUANTITATE THE MAJOR RADIOMETABOLITES PRESENT IN SEQUENTIAL SAMPLES OF BLOOD AND URINE OBTAINED SIMULTANEOUSLY FROM BOTH MOTHER AND FETUS.

J130 NEUROLOGICAL CLINICAL RESEARCH CENTER, NS 8075-03, ROWLAND, LEWIS, F., UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA, PA., 4/70-3/71, CONTINUATION, $266,570. NINDS

A NEUROLOGICAL CLINICAL CENTER TO TRAIN FUTURE INVESTIGATORS AND DO RESEARCH ON SERIOUS SYSTEM DISEASES TO DEVELOP NEW APPROACHES TO MENTAL DISORDERS. A PROGRAM OF BASIC RESEARCH AND CLINICAL RESEARCH.

J135 PROGRAM FOR A RESEARCH CENTER IN MENTAL RETARDATION HD-02454-02 BUSCH, R.L., UNIVERSITY OF KANSAS, LAWRENCE, KANSAS, 1/70-12/71 CONTINUATION $107,261, NICHD

THIS RESEARCH CONCERNS CREATION OF ADMINISTRATIVE STRUCTURE, ENHANCED COMMUNICATION, COORDINATION, AND MANAGEMENT DEVELOPMENT OF COMMON FACILITIES FOR RESEARCH SUPPORT AND DEVELOPMENT IMPLEMENTATION RESEARCH AND THE INTENSIFICATION OF MAINTAINING RESEARCH AND SYNTHESIS OF RESEARCH, RESEARCH APPLICATION, AND RESEARCH TRAINING.


NO ABSTRACT SUPPLIED

J145 RESEARCH IN MENTAL RETARDATION AND CHILD DEVELOPMENT HD-02274-04 FARWELL, GEORGE W., UNIVERSITY OF WASHINGTON, SEATTLE, WASHINGTON, 7/69-6/70 RENEWAL, $453,940, NICHD

THIS RESEARCH CONCERNS SUPPORT FOR THE DIRECTOR AND THE SMALL STAFF NECESSARY TO IMPLEMENT THE MULTIDISCIPLINARY RESEARCH PROGRAMS OF THE M.R.C.D. CENTER WHICH ARE CONDUCTED AND STEERED BY THE CENTER IN SUCH A WAY AS TO MAXIMIZE INTER-DISCIPLINARY COORDINATION AND SCIENTIFIC PRODUCTIVITY.

J150 MENTAL RETARDATION RESEARCH CENTER—CENTER GRANT HD 01799-05, GORDON, HARRY H., YESHIVA UNIVERSITY, NEW YORK, N.Y., 9/69-8/70 RENEWAL, $563,507, NICHD

THIS PROJECT CONCERNS SUPPORT OF THE SCIENTIFIC ACTIVITIES OF THE DIRECTOR AND STAFF OF A CENTER FOR RESEARCH IN MENTAL RETARDATION AND HUMAN DEVELOPMENT DURING THE NEXT 5 YEARS OF INITIATION AND EXPANSION OF RESEARCH PROGRAMS. RECRUITMENT OF SCIENTIFIC PERSONNEL, IMPLEMENTATION OF APPLICATIONS WITH COMMUNITY AGENCIES FOR THE RETARDED, AND DETAILED PLANNING OF NEW RESEARCH FACILITIES IN ORDER TO ENSURE MAXIMUM SCIENTIFIC PRODUCTIVITY.

J151 RESEARCH PROGRAM ON RETARDED INTELLECTUAL DEVELOPMENT HD-00973-07, HAYWOOD, H. C., GEORGE PEABODY COLLEGE FOR TEACHERS, NASHVILLE, TENNESSEE, 6/70-5/71, CONTINUATION $221,192, NICHD


J155 RESEARCH IN MENTAL RETARDATION HD4147-02 MOSE, HUGO W., MASS. STATE DEPT. OF MENTAL HEALTH, WAKEFIELD, MASS., 1/70-6/70, CONTINUATION $129,207, NICHD
The purpose of this project is to establish a center for research in mental retardation. The center will provide inpatient metabolic and laboratories for biomedical research, behavior modification units, specialized diagnostic facilities.

**J160**

Steroid receptors in target tissues; HD-04783-01; Heinrichs, William L.; University of Washington, Seattle, Washington; 6/70-5/71; Initial: $18,687; NICHD

The major aim of this research is to establish a direct relationship between the cytoplasmic and nuclear binding of potent steroid hormones in different target organs and the physiologic effects of those compounds. This relationship will be studied by preparing radioactive receptors and studying the transfer of the cytoplasmic receptor steroid complex to nuclei of different organs. In addition, the significance of binding in relation to the mechanism of hormone action will be studied.

**J165**

Sensory integrative processes and learning disorders; H-126-1; Ayres, A. Jean; University of Southern California, Los Angeles, California; 7/1/70-6/30/71, continuation, $14,215. HSMHA-MCHS

This research focuses on sensorimotor training to emphasize intersensory integration of tactile, proprioceptive, auditory and visual stimuli through hypothesized central nervous system mechanisms and presumed use of the reticular activating system.

**J170**

Supplemental daytime care of infants (group care of infants) D-255; Keister, Mary E.; University of North Carolina, Greensboro, North Carolina; 7/1/69-6/30/70, renewal, $120,734. HSMHA-MCHS

This project will establish a nursery center to serve as a model for day care of children 3 to 23 months. Non-professionals will be trained to give most of the care to the children. The program will attempt to replicate the emotional and learning milieu of a family.

**J175**

Teratological studies with inbred mice; HD-03110-03; Miller, C. Arden; University of North Carolina, Chapel Hill, N.C.; 9/69-8/70, renewal, $210,535. NICHD

This project will be a broadly focused research approach to problems of normal and pathological intellectual development. Two major areas of study are 1. Effects of social and cultural deprivation on intellectual development. 2. The manifold courses of biological mental retardation.

**J180**

The child and the state H-91; Eliot, Martha M.; American Public Health Association, New York, N.Y.; 6/1/70-5/31/71, continuation, $40,560. HSMHA-MCHS

This research embraces social welfare, juvenile delinquency, youth employment and child labor, health and medical care, education and human rights. It is proposed that the research be used for a new and enlarged edition of the Child and the State by the American Public Health Association, and published by the Harvard University Press.

**J185**

Training and research facility in child welfare; SF-200; Turner, John B.; Western Reserve University, Cleveland, Ohio; 7/1/69-6/30/70, renewal, $503,447. HSMHA-MCHS

This project proposes to establish a training and research facility at a settlement house in a low-income area. New approaches to program planning and provision of services for the community will be utilized in training social work students. The welfare of children will receive particular emphasis.

**J190**

Unc child development and mental retardation institute; HD-03100-03; Miller, C. Arden; University of North Carolina, Chapel Hill, N.C.; 9/69-8/70, renewal, $210,535. NICHD

This project will be a broadly focused research approach to problems of normal and pathological intellectual development. Two major areas of study are 1. Effects of social and cultural deprivation on intellectual development. 2. The manifold courses of biological mental retardation.

**J191**

Uptake of amino acids by the fetus of the ewe; HD-03255-03; Curet, Luis B.; University of Wisconsin, Madison, Wisconsin; 5/70-4/71; continuation, $18,630. NICHD

The purpose of this research is to study the uterine and umbilical blood flow and oxygen and amino acid metabolism in the pregnant ewe.
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C275 EXPERIMENTAL METABOLIC ENCEPHALOPATHIES $5,451
C335 MOLECULAR BASIS OF CEREBRAL DEGENERATION $53,918
C440 MOLECULAR NEUROBIOLOGY—PROTEINS IN THE NERVOUS SYSTEM $75,906
C510 METABOLISM OF CORTICOSTEROIDS IN THE PREGNANT PRIMATE $30,413
C585 LIPID COMPOSITION OF BRAIN IN PATHOLOGICAL STATUS $46,129
C590 STUDY OF MEIOSIS IN RELATION TO MENTAL RETARDATION $34,746
D010 A FORTY YEAR FOLLOW-UP OF MENTAL RETARDATES $93,073
D055 CEREBRAL IMPEDANCE AND HOMEOSTASIS $44,142
D070 COGNITIVE ASSESSMENT PROGRAM $19,937
D110 EEG AND SLEEP STATE MATURATION INFANTS $28,500
G025 A PILOT PROJECT IN CURRICULUM DEVELOPMENT $4,651
G040 ADJUSTMENT AND ACHIEVEMENT IN A DESEGREGATED SCHOOL $45,679
G050 AN INTENSIVE TRAINING CURRICULUM FOR THE EDUCATION $170,549
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G100 DETERMINING CRITERIA FOR ASSESSMENT AND REMEDIATION $167,643
G100 THE EFFECT OF A PROGRAM OF GROSS BODY MOVEMENT $174,849
H025 COMMUNITY ORGANIZATION ACTION PLAN FOR MENTALLY RETARDED $95,000
J120 MENTAL RETARDATION RESEARCH CENTER, UCLA $548,428
J126 METABOLISM OF CORTICOSTEROIDS IN THE PREGNANT PRIMATE $30,323
J140 RETURN TO THE COMMUNITY OF THE MENTALLY ILL $36,776
J165 SENSORY INTEGRATIVE PROCESSES AND LEARNING DISORDERS $14,215

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A251 INTERMEDIARY METABOLISM IN THE PREMATURE INFANT $11,764
A475 STUDIES ON THE RESPIRATORY DISTRESS SYNDROME $16,338
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| **D145** LEARNING AND TRANSFER PROCESS IN MENTAL $75,019 |
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| **H035** COMPREHENSIVE COMMUNITY-BASED SERVICES FOR THE RETARDED $91,949 |

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| **H037** CONFERENCE ON VOCATIONAL REHABILITATION $60,000 |
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| **J110** LAW, MENTAL DISORDER AND JUVENILE PROCESSES $103,236 |

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A365 PERINATAL MALNUTRITION AND DEVELOPMENT OF THE OFFSPRING, $22,516
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J035 Development of Brain Electrical Activity of Infants $45,597
J119 Mental Retardation Clinical Research Center $13,598

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A106 CONGENITAL MALFORMATIONS IN MAMMALS $62,538
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- A481 Surfactant and Hyaline Membrane Disease, $30,647
- C400 Metabolism of Aryn Amino Acids in the Mentally Retarded, $5,853
- G170 Sensory-Perceptual Language Training, $74,198
- J020 Development of Vocational Skills in TMR Children, $21,137
- J030 Center Grant JFK Center-George Peabody College, $301,011
- J151 Research Program on Retarded Intellectual Development, $221,192

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- C050 Ammonia, Bilirubin, and Low Thiamine Encephalopathies, $29,069
- C085 Biochemistry of Sphingosine and Sphingolipids, $6,365
- D133 Inkblot Perception and Personality, $33,375
- G030 A Research and Training Program, $93,179
- G070 Bennington County Day Program, $12,500
- G125 Evaluation of Systematic Instructional Procedures, $127,669

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- G125 Investigation of Systematic Instructional Procedures, $127,669
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- D170 Skills of Mentally Retarded, $55,100
- G080 Classical Conditioning in Retarded and Normals, $37,482
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